

UNCLASSIFIED

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

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 4: Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604102C / <i>Guam Defense Development</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
Total Program Element	-	0.000	0.000	78.300	-	78.300	-	-	-	-	-	-
MD65: <i>Defense of Guam Development</i>	-	0.000	0.000	78.300	-	78.300	-	-	-	-	-	-

Program MDAP/MAIS Code: 362

Note

This PE is a new start. The increase from FY 2021 to FY 2022 provides the initiation of acquisition and research and development efforts for Defense of Guam.

A. Mission Description and Budget Item Justification

This program develops an integrated air and missile defense (IAMD) system on Guam against air-breathing, ballistic, and hypersonic missile threats. The defense of Guam is a high priority mission for the Department of Defense. An IAMD system will form a key part of deterring potential adversary aggression against Guam. A credible deterrent requires a broad strategy involving investments in passive defense measures, offensive capabilities, and other resilient approaches.

The Department is assessing alternatives for an IAMD architecture on Guam. While the final architecture designs and configuration are not yet finalized, there are common areas to the proposed architecture options which this funding is designed to jumpstart. The final architecture design will be determined based on the results of CAPE and MDA architecture studies. To avoid delays in delivering capability, MDA requests funding in FY22 to begin studies and analysis, architecture development and siting analysis that are common to all architectural proposals, to include integration efforts between Army and Navy systems.

B. Program Change Summary (\$ in Millions)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	78.300	-	78.300
Total Adjustments	0.000	0.000	78.300	-	78.300
• 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	0.000	0.000			
• Missile Defeat and Defense Enhancement	0.000	0.000	0.000	-	0.000
• Other Adjustment	0.000	0.000	78.300	-	78.300

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Missile Defense Agency		Date: May 2021
Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> / BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 Program Element (Number/Name) PE 0604102C / <i>Guam Defense Development</i>	

Change Summary Explanation

Increase in FY 2022 provides the establishment of new Program Element (PE) 0604102C for the Defense of Guam to begin studies and analysis, architecture development and siting analysis that are common to all architectural proposals.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Missile Defense Agency										Date: May 2021		
Appropriation/Budget Activity 0400 / 4					R-1 Program Element (Number/Name) PE 0604102C / Guam Defense Development				Project (Number/Name) MD65 / Defense of Guam Development			
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
MD65: Defense of Guam Development	-	0.000	0.000	78.300	-	78.300	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This is a new start in FY 2022. The increase from FY 2021 to FY 2022 provides the initiation of acquisition and research and development efforts for Defense of Guam.

A. Mission Description and Budget Item Justification

MDA is developing options for an Integrated Air and Missile Defense (IAMD) System for Defense of Guam. The Department has undertaken studies on a range of missile defense architecture options, emphasizing effectiveness, survivability, and flexibility against an evolving threat. While the final architecture designs and configuration are not yet finalized, there are common areas to the proposed architecture options which this funding is designed to jumpstart. This funding will allow the Department to more rapidly field these capabilities.

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

	FY 2020	FY 2021	FY 2022
Title: Guam Defense System (GDS)	0.000	0.000	78.300
Articles:	-	-	-
Description: This program develops an integrated air and missile defense system on Guam against air-breathing, ballistic, and hypersonic missile threats, however, architecture designs are still being finalized. This funding initiates development of multiple architecture options by investing in key enabling capabilities common to all proposed architecture solutions. Such efforts include:			
<ul style="list-style-type: none"> - Joint Track Management Capabilities (JTMC) Bridge Development between the IAMD Battle Command System (IBCS), Aegis Weapon System (AWS), and the Command and Control, Battle Management, and Communications (C2BMC) system to promote greater integration between Army and Navy assets - Spectrum management studies for terminal defense radar - Acceleration of Sea-Based Terminal capabilities - Conduct systems engineering planning, architecture development, requirements analysis, configuration management functional flow down, specifications update, risk management, and trade studies - Update geographic specific threat models and scenarios, define test requirements, and update applicable specifications - Develop Concept of Operations and conduct Battle Management Design and Analysis - Perform Model Based Systems engineering, threat modeling, and Modeling and Simulation - Develop facilities requirements and design 			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2022 Missile Defense Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604102C / <i>Guam Defense Development</i>	Project (Number/Name) MD65 / <i>Defense of Guam Development</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022
<p>- Identify areas of consideration for the Defense of Guam site to include requirements definition, identify geographic locations that optimize operations, apply exclusionary and evaluative criteria, and location ranking</p> <p>- Initiation of Environmental Impact Assessment</p> <p>-Develop Acquisition and Contracting plans</p> <p>The final architecture design will be determined based on the results of CAPE and MDA architecture studies. These initial investments provide a baseline of capability to support a range of architecture options while allowing the Department to complete a robust discussion on the best architecture to pursue.</p> <p>FY 2021 Plans: N/A</p> <p>FY 2022 Plans: SEE ABOVE</p> <p>FY 2021 to FY 2022 Increase/Decrease Statement: The increase from FY 2021 to FY 2022 provides the initiation of acquisition and research and development efforts for Defense of Guam.</p>			
Accomplishments/Planned Programs Subtotals	0.000	0.000	78.300

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 Complete</u>	<u>Total Cost</u>
• 0208902C: <i>MD65: Defense of Guam Procurement</i>	0.000	0.000	40.000	-	40.000	-	-	-	-	-	-

Remarks

D. Acquisition Strategy

Acquisition strategy to be finalized after the Defense of Guam study is completed.

UNCLASSIFIED

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

Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604102C / Guam Defense Development	Project (Number/Name) MD65 / Defense of Guam Development
--	--	--

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			
Guam Defense System (GDS) - Guam Defense System	Various	Various : Various	0.000	0.000		0.000		78.300	Oct 2021	-		78.300	0.000	78.300	0.000
Subtotal			0.000	0.000		0.000		78.300		-		78.300	0.000	78.300	N/A

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

	Prior Years	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	0.000	78.300	-	78.300	0.000	78.300	N/A

Remarks
N/A

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Missile Defense Agency						Date: May 2021									
Appropriation/Budget Activity 0400 / 4				R-1 Program Element (Number/Name) PE 0604102C / <i>Guam Defense Development</i>				Project (Number/Name) MD65 / <i>Defense of Guam Development</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 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026					
GDS Development						◇ ◇ ◇ ◇									

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Missile Defense Agency		Date: May 2021
Appropriation/Budget Activity 0400 / 4	R-1 Program Element (Number/Name) PE 0604102C / <i>Guam Defense Development</i>	Project (Number/Name) MD65 / <i>Defense of Guam Development</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GDS Development	1	2022	4	2022

Note
 Based on the OUSD(C) FY 2022 President's Budget Submission Guidance, fiscal years covered in the justification material will include FY 2020 through FY 2022. Planned entries in the R4 may continue past FY 2022, out-years will be addressed in future budget submissions.