

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>
---	--

COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	67.055	9.479	9.437	10.994	-	10.994	10.924	10.772	10.957	11.180	Continuing	Continuing
2222: <i>Modeling & Simulation</i>	67.055	9.479	9.437	10.994	-	10.994	10.924	10.772	10.957	11.180	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element addresses projects under the Navy Modeling and Simulation (M&S) Office (NMSO). It supports technical and management initiatives with the aim of bringing organization, focus, and efficiency to the development and use of M&S throughout the Navy and DoD. It provides a central organization for the formulation and implementation of policy and guidance in M&S, and represents Navy interests in Joint and other agency initiatives. It funds efforts to define and coordinate the corporate Navy M&S policy, M&S execution, and guidance to evolve an interoperable and reusable core M&S capability consistent with the M&S technical framework prescribed by DoD across the FYDP.

DON M&S priorities include Systems Engineering and Integration, Model Based Systems Engineering (MBSE), and Interoperability and Requirements Development to determine the required networks, infrastructure, and data needed to support enterprise DON M&S capabilities which also leverage M&S standards, information systems, virtual environments, and T&E Augmentation in support of warfighting decision-making.

Efforts are organized around three product areas:

- (1) **Core Services:** This activity provides essential planning, program management, coordination, and execution of Navy M&S efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, and other agencies to including policies and procedures necessary to support the creation of a robust and credible capability to create synthetic environments, accurately represent platforms and systems, predict outcomes, and provide inputs to Naval decision makers and operational users in support of numerous areas, including acquisition, analysis, training, and experimentation.
- (2) **Community Services:** This activity provides M&S community-wide services and digital ecosystems/venues to M&S policies, standards, VV&A, collaborative digital engineering and support discoverability/reuse across the DON, acquisition, analytics, training, and experimentation communities.
- (3) **Community Experiments and Prototypes:** This activity executes experiments and prototypes focusing on the advancement of M&S capabilities and technology to increase M&S efficiency and/or effectiveness in key war fighting areas.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Navy	Date: March 2023
---	-------------------------

Appropriation/Budget Activity 1319: <i>Research, Development, Test & Evaluation, Navy / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>
---	--

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	9.772	9.437	10.763	-	10.763
Current President's Budget	9.479	9.437	10.994	-	10.994
Total Adjustments	-0.293	0.000	0.231	-	0.231
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.293	0.000			
• Rate/Misc Adjustments	0.000	0.000	0.231	-	0.231

Change Summary Explanation

FUNDING: No significant change.

TECHNICAL: No significant change.

SCHEDULE: Activities and milestones clarified to better show synchronization of Projects 2222 activities and deliverables for each product area.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy										Date: March 2023		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0308601N / Modeling & Simulation Support				Project (Number/Name) 2222 / Modeling & Simulation			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
2222: Modeling & Simulation	67.055	9.479	9.437	10.994	-	10.994	10.924	10.772	10.957	11.180	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Program Element addresses projects under the Navy Modeling and Simulation (M&S) Office (NMSO). It supports technical and management initiatives with the aim of bringing organization, focus, and efficiency to the development and use of M&S throughout the Navy and DoD. It provides a central organization for the formulation and implementation of policy and guidance in M&S, and represents Navy interests in Joint and other agency initiatives. It funds efforts to define and coordinate the corporate Navy M&S policy, M&S execution, and guidance to evolve an interoperable and reusable core M&S capability consistent with the M&S technical framework prescribed by DoD across the FYDP.

DON M&S priorities include Systems Engineering and Integration, Model Based Systems Engineering (MBSE), and Interoperability and Requirements Development to determine the required networks, infrastructure, and data needed to support enterprise DON M&S capabilities which also leverage M&S standards, information systems, virtual environments, and T&E Augmentation in support of warfighting decision-making.

Efforts are organized around three product areas:

(1) Core Services: This activity provides essential planning, program management, coordination, and execution of Navy M&S efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, and other agencies to including policies and procedures necessary to support the creation of a robust and credible capability to create synthetic environments, accurately represent platforms and systems, predict outcomes, and provide inputs to Naval decision makers and operational users in support of numerous areas, including acquisition, analysis, training, and experimentation.

(2) Community Services: This activity provides M&S community-wide services and digital ecosystems/venues to M&S policies, standards, VV&A, collaborative digital engineering and support discoverability/reuse across the DON, acquisition, analytics, training, and experimentation communities.

(3) Community Experiments and Prototypes: This activity executes experiments and prototypes focusing on the advancement of M&S capabilities and technology to increase M&S efficiency and/or effectiveness in key war fighting areas.

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

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Title: CORE SERVICES	1.092	1.147	1.344	0.000	1.344
Articles:	-	-	-	-	-
Description: This activity provides essential planning, program management, coordination, and execution of Navy M&S efforts with other Services, the Office of Secretary of Defense (OSD), the Joint Staff, and other					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>	Project (Number/Name) 2222 / <i>Modeling & Simulation</i>

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

	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>agencies that to including policies and procedures necessary to support the creation of a robust and credible capability to create synthetic environments, accurately represent platforms and systems, predict outcomes, and provide inputs to Naval decision makers and operational users in support of numerous areas, including acquisition, analysis, training, and experimentation.</p> <p>These core services support the community-wide alignment planning and execution of NMSO community services and experiments and prototypes. It manages and maintains the Modeling and Simulation Quality Assurance (VV&A) process and integration with Navy Commands and the Fleet experiments and demonstration and includes guidelines for constructing, applying, and documenting modeling, simulation, and data, including establishment and implementation of VV&A training curriculum for developers and Accreditation Agents. It also includes development and updates of Navy M&S policies and standards.</p> <p>FY 2023 Plans:</p> <ul style="list-style-type: none"> - Continue to promote consistent application of M&S "Best Practices" and associated technologies to improve support across the DON Enterprise. - Develop and sustain core M&S tools, architecture, performance metrics, and models supporting cross-domain kill-chain level analysis at a system of systems level. - Leverage cloud technologies, Automated Test/Re-Test (ATRT), data pipelining efforts, AI/ML, and Modular Open Software Architecture (MOSA) capabilities to scale Navy M&S capabilities in support of enterprise sandbox/LVC technologies. - Support the sustainment of core modeling capabilities and develop modeling growth capabilities into cloud environments at all security levels leveraging the Naval Integrated Modeling Environment (IME). <p>FY 2024 Base Plans:</p> <ul style="list-style-type: none"> - Continue to promote consistent application of M&S "Best Practices" and associated technologies to improve support across the DON Enterprise, DOD and other services to increase M&S efficiency and effectiveness. - Continue the execution of advancement of VV&A policy, training and education across the community. - Continue to work with DOD and other services to develop and/or refine M&S related standards to support cross-program and cross-service interoperability. 					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy	Date: March 2023
--	-------------------------

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>	Project (Number/Name) 2222 / <i>Modeling & Simulation</i>
--	--	---

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
---	---------	---------	--------------	-------------	---------------

<p>- Planning, aligning and management of NMSO core services, community services and experiments and prototypes across the DON, DOD and other services.</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: There is no significant funding change from FY 2023 to FY 2024.</p>					
--	--	--	--	--	--

Title: COMMUNITY SERVICES	2.260	2.296	2.683	0.000	2.683
----------------------------------	-------	-------	-------	-------	-------

	Articles: -	-	-	-	-
--	-----------------------	---	---	---	---

Description: This activity provides M&S community-wide services and digital ecosystems/venues to develop and implement M&S policies, standards, VV&A, collaborative digital engineering and support discoverability/reuse across the DON, acquisition, analytics, training, and experimentation communities. This activity promotes M&S reuse through cooperative Community M&S activities which identify and prioritize M&S capability requirements between and across Communities. This coordination includes the leveraging M&S standards, information systems, virtual environments, and T&E Augmentation in support of warfighting decision-making. It manages and maintains the Naval-Leveraging Innovations, Frameworks, and Technologies (LIFT) Environment as the central Naval M&S information resource to support informed M&S design, development, integration, and reuse across the Navy. LIFT provides collaboration spaces for M&S Plans and Policy; Education and Training; Verification, Validation, and Accreditation (VV&A) amongst other areas that are critical to M&S. It also supports the development and use of core modeling capabilities and digital engineering ecosystems/cloud capabilities environments such as the Naval Integrated Modeling Environment (IME). It also supports M&S related educational efforts such as the Naval Postgraduate School (NPS), Modeling Virtual Environments and Simulation (MOVES) curriculum which qualifies officers to fill 6202-P coded billets.

FY 2023 Plans:

- Continue to support subject matter expert support to and "best practices" development and expansion of M&S tools via open standards and interfaces, enterprise reference architectures, common data and track management and related enterprise sandbox technologies.
- Continue subject matter expert support to and development and expansion of M&S tools to support Fleet priority capabilities by considering integration of Artificial Intelligence (AI)/Machine Learning (ML) open standards into appropriate enterprise sandbox platforms.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy				Date: March 2023		
Appropriation/Budget Activity 1319 / 7		R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>		Project (Number/Name) 2222 / <i>Modeling & Simulation</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)						
<ul style="list-style-type: none"> - Continue and expand integration with M&S via the Integrated Modeling Environment (IME), with associated open standards and policy guidance. <p>FY 2024 Base Plans:</p> <ul style="list-style-type: none"> - Continue expansion and improvements of collaboration and discoverability tools and efforts such as the Naval-Leveraging Innovations, Frameworks, and Technologies (LIFT) Environment. - Continue expansion and improvements of core modeling capabilities and digital engineering ecosystems/cloud capabilities environments such as the Naval Integrated Modeling Environment (IME). - Continue updates of and improved access to authoritative M&S data sources such as Threat and Blue data. - Continue all efforts not noted as completed. <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Increase from FY2023 to FY2024 to better reflect program phasing plan adjustments and maintain alignment with supported programs and systems.</p>						
<p>Title: COMMUNITY EXPERIMENTS and PROTOTYPES</p> <p align="right">Articles:</p>						
		6.127	5.994	6.967	0.000	6.967
		-	-	-	-	-
<p>Description: This activity executes experiments and prototypes focusing on the advancement of M&S capabilities and technology, to increase achieve M&S efficiency and/or effectiveness in key war fighting areas. This activity executes the development of tools necessary to enable the access and use of operationally relevant M&S products to support Navy training, warfare assessments and acquisition requirements focusing on supporting Navy war fighting priorities such as Long Range Fires and Naval Operational Architecture (NOA). Individual efforts focus on developing or evaluating approaches to optimize training, assessments and acquisition functional, mission objectives through more efficient development and use of M&S. This funding also includes efforts on areas such as virtual environments and LVC/T&E Augmentation in support of warfighting decision-making.</p> <p>FY 2023 Plans:</p>						

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>	Project (Number/Name) 2222 / <i>Modeling & Simulation</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>- Expand and develop M&S tools, policy and processes, and Live/Virtual/Constructive laboratory infrastructure to allow the secure exchange of data enabling the effective development, modernization, and utilization of M&S Tools and Analytics and associated enterprise sandbox technologies.</p> <p>- Continue and expand upon M&S development tool sets with open standards and interfaces to support priority mission capabilities and related enterprise sandbox technologies.</p> <p>- Support M&S experiments and prototype events and generation of validated performance metrics, models, design, system-of-system requirements and enterprise mission areas, employing applicable enterprise sandbox technologies.</p> <p>- Advance and efficiently integrate leading edge M&S capabilities in response to complex emerging threats and future warfighting environments.</p> <p>FY 2024 Base Plans:</p> <p>- Improvements in the ability to model and simulate threat systems and environments that span application areas across force level analysis, high fidelity applications, digital engineering applications, and test and evaluation.</p> <p>- Prototype means, methods, and processes that apply artificial intelligence and/or machine learning to enhance simulation and simulation environments</p> <p>- Continue development of M&S capabilities to efficiently examine all domain warfighting capabilities and concepts to advanced, system of systems maritime warfighting.</p> <p>- Advancing cross-system and cross-service LVC interoperability and interface enhancements</p> <p>- Improvement and enhancements in ability to conduct physics-based modeling in support of naval application such as: fluid/structure interaction for severe conditions, dispersion of energy, multi-body interactions, multi-physics phenomena</p> <p>- Complete the develop M&S tools, policy and processes, and Live/Virtual/Constructive laboratory infrastructure to allow the secure exchange of data enabling the effective development, modernization, and utilization of M&S Tools and Analytics and associated enterprise sandbox technologies.</p>					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>	Project (Number/Name) 2222 / <i>Modeling & Simulation</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
<p>- Complete M&S development tool sets with open standards and interfaces to support priority mission capabilities and related enterprise sandbox technologies.</p> <p>- Complete Support M&S experiments and prototype events and generation of validated performance metrics, models, design, system-of-system requirements and enterprise mission areas, employing applicable enterprise sandbox technologies.</p> <p>FY 2024 OCO Plans: N/A</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Increase from FY2023 to FY2024 due to project execution moving to higher impact as enterprise solutions to account for updated task phasing and required deliverables to support aligned enterprise M&S scaling for complex emerging threats and future warfighting requirements.</p>					
Accomplishments/Planned Programs Subtotals	9.479	9.437	10.994	0.000	10.994

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

N/A

Remarks

D. Acquisition Strategy

This is a non-ACAT program. The focus of the Navy Modeling and Simulation (M&S) efforts is to facilitate and enable the efficient use of M&S by minimizing duplication of M&S efforts and maximize the reuse of M&S and data. The Navy's Enterprise M&S is being extended and scaled for applicability across the Department of the Navy to enable open, affordable and rapid integrated M&S capability development.

This effort synergizes with and leverages/supports other funded efforts including Intelligence Mission Data (IMD) (RDTEN/PE 0307577N), Digital Warfare (RDTEN/PE 0604027N), Advanced Combat Systems Tech (RDTEN/PE 0603382N/Proj 0324), and Modeling & Simulation Support (OMN/4B3N).

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / Modeling & Simulation Support	Project (Number/Name) 2222 / Modeling & Simulation
--	---	--

Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Infrastructures, integration and testing	Various	Various : Various	12.544	0.000		0.000		0.000		-		0.000	0.000	12.544	-
Analysis, policies, plans interoperability	Various	Various : Various	17.625	0.000		0.000		0.000		-		0.000	0.000	17.625	-
User interfaces, modeling modules, tactical software	Various	Various : Various	2.439	0.000		0.000		0.000		-		0.000	0.000	2.439	-
DWP-T - SYSCOMS	Various	Various : Various	0.874	1.001	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
DWP-T - Warfare Centers	WR	Various : Various	0.832	0.875	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
DWP-T - Other, Govt	Various	Various : Various	0.312	0.338	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - SYSCOMS	Various	Various : Various	0.871	1.008	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - Warfare Centers	WR	Various : Various	0.830	0.936	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - Other, Govt	Various	Various : Various	0.312	0.350	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - SYSCOMS	Various	Various : Various	0.871	0.756	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - Warfare Centers	WR	Various : Various	0.830	0.935	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - Other, Govt	Various	Various : Various	0.312	0.350	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Core Services	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Community Services	Various	Various : Various	0.000	0.000		0.453	Nov 2022	0.360	Nov 2023	-		0.360	Continuing	Continuing	Continuing
Community Experiments and Prototypes	Various	Various : Various	0.000	0.000		3.597	Nov 2022	3.545	Nov 2023	-		3.545	Continuing	Continuing	Continuing
Subtotal			38.652	6.549		4.050		3.905		-		3.905	Continuing	Continuing	N/A

Remarks
In FY23 and out, Modeling and Simulation support cost category alignments have been updated to better match R-2A activities and categories.

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy												Date: March 2023			
Appropriation/Budget Activity					R-1 Program Element (Number/Name)					Project (Number/Name)					
1319 / 7					PE 0308601N / Modeling & Simulation Support					2222 / Modeling & Simulation					
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Infrastructures, integration and testing	Various	Various : Various	7.305	0.000		0.000		0.000		-		0.000	0.000	7.305	-
Analysis, policies, plans interoperability	Various	Various : Various	2.770	0.000		0.000		0.000		-		0.000	0.000	2.770	-
User interfaces, modeling modules, tactical software	Various	Various : Various	1.109	0.000		0.000		0.000		-		0.000	0.000	1.109	-
Digital Warfare Platform (DWP) - SYSCOMS	Various	Various : Various	0.240	0.255	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Platform (DWP) - Warfare Centers	WR	Various : Various	0.214	0.227	Dec 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Platform (DWP) - Other, Govt	Various	Various : Various	0.080	0.085	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - SYSCOMS	Various	Various : Various	0.240	0.255	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - Warfare Centers	WR	Various : Various	0.214	0.226	Dec 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - Other, Govt	Various	Various : Various	0.080	0.085	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - SYSCOMS	Various	Various : Various	0.240	0.256	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - Warfare Centers	WR	Various : Various	0.212	0.226	Dec 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - Other, Govt	Various	Various : Various	0.080	0.085	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Core Services	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Community Services	Various	Various : Various	0.000	0.000		1.843	Nov 2022	2.323	Nov 2023	-		2.323	Continuing	Continuing	Continuing
Community Experiments and Prototypes	Various	Various : Various	0.000	0.000		2.397	Nov 2022	3.422	Nov 2023	-		3.422	Continuing	Continuing	Continuing
Subtotal			12.784	1.700		4.240		5.745		-		5.745	Continuing	Continuing	N/A

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / Modeling & Simulation Support	Project (Number/Name) 2222 / Modeling & Simulation
--	---	--

Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
In FY23 and out, Modeling and Simulation support cost category alignments have been updated to better match R-2A activities and categories.

Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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			
Infrastructures, integration and testing	Various	Various : Various	9.740	0.000		0.000		0.000		-		0.000	0.000	9.740	-
Analysis, policies, plans interoperability	Various	Various : Various	3.592	0.000		0.000		0.000		-		0.000	0.000	3.592	-
User interfaces, modeling modules, tactical software	Various	Various : Various	1.437	0.000		0.000		0.000		-		0.000	0.000	1.437	-
Digital Warfare Platform (DWP) - SYSCOMS	Various	Various : Various	0.130	0.178	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Platform (DWP) - Warfare Centers	WR	Various : Various	0.104	0.167	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Platform (DWP) - Other, Govt	Various	Various : Various	0.050	0.063	Dec 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - SYSCOMS	Various	Various : Various	0.130	0.177	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - Warfare Centers	WR	Various : Various	0.104	0.166	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Design (DWD) - Other, Govt	Various	Various : Various	0.050	0.063	Dec 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - SYSCOMS	Various	Various : Various	0.130	0.188	Dec 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Digital Warfare Applications (DWA) - Warfare Centers	WR	Various : Various	0.102	0.166	Nov 2021	0.000		0.000		-		0.000	Continuing	Continuing	Continuing

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / Modeling & Simulation Support	Project (Number/Name) 2222 / Modeling & Simulation
--	---	--

Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total			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	Cost To Complete	Total Cost	
Digital Warfare Applications (DWA) - Other, Govt	Various	Various : Various	0.050	0.062	Mar 2022	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
Core Services	Various	Various : Various	0.000	0.000		1.147	Nov 2022	1.344	Nov 2023	-		1.344	Continuing	Continuing	Continuing
Community Services	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Community Experiments and Prototypes	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Subtotal			15.619	1.230		1.147		1.344		-		1.344	Continuing	Continuing	N/A

Remarks
In FY23 and out, Modeling and Simulation support cost category alignments have been updated to better match R-2A activities and categories.

	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	67.055	9.479	9.437	10.994	-	10.994	Continuing	Continuing	N/A

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2024 Navy **Date:** March 2023

Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / Modeling & Simulation Support	Project (Number/Name) 2222 / Modeling & Simulation
--	---	--

Fiscal Year	2022				2023				2024				2025				2026				2027				2028			
	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
DoN M&S Eco-System																												
Core Services																												
- Call for Proposals						◆				◆					◆							◆						◆
- NMSO Summit Series						◆				◆					◆							◆						
- Policy Procedures and Standards																												
- VV&A Policy revision						◆				◆																		
Community Services																												
Community Experiments and Prototypes																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2024 Navy		Date: March 2023
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0308601N / <i>Modeling & Simulation Support</i>	Project (Number/Name) 2222 / <i>Modeling & Simulation</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Proj 2222				
Core Services: Call for Proposals	1	2022	3	2028
Core Services: Summit Series	1	2022	4	2028
Core Services: Policy Procedures and Standards	1	2022	4	2028
Core Services: VV&A Policy revision	1	2022	4	2028
Community Services: Community Services	1	2022	4	2028
Community Experiments and Prototypes: Community Experiments and Prototypes	1	2022	3	2028