Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy											Date: March 2019	
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0305208N *I Distributed Common Ground Sys*							
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	271.194	40.150	42.846	0.000	-	0.000	0.000	0.000	0.000	0.000	130.708	484.898
2174: *Distributed Common Ground System-Navy (DCGS-N)*	206.841	0.325	0.222	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	207.388
2227: *Distributed Common Ground System (DCGS-N) Inc 2*	64.353	39.825	42.624	0.000	-	0.000	0.000	0.000	0.000	0.000	130.708	277.510
Program MDAP/MAIS Code: **Project MDAP/MAIS Code(s):** MN40, M464												

Note

Funding for the following projects has been realigned out of PE 0305208N into PE 0304785N as part of Program Element Consolidation starting in FY20: Project 2174 (Distributed Common Ground System-Navy (DCGS-N) and Project 2227 (DCGS-N Increment 2).

A. Mission Description and Budget Item Justification

The Distributed Common Ground System - Navy (DCGS-N) is the Navy's portion of the Under Secretary of Defense, Intelligence (USD (I)) DCGS Family of Systems (FoS). The Department of Defense (DoD) has defined a DCGS architecture that will be compatible and interoperable across all of the Services' Intelligence, Surveillance and Reconnaissance (ISR) systems and operations. DCGS accesses and ingests data from spaceborne, airborne, subsurface, and surface ISR collection assets, intelligence databases and intelligence producers. This collected data is shared across a joint enterprise using the DCGS Integration Backbone (DIB) and in time, the Defense Intelligence Information Enterprise (DI2E) to enhance access and sharing of ISR information across Joint forces through the use of common enterprise standards and services. DCGS FoS supports Joint Task Force (JTF)-level and below combat operations with critical intelligence for battle management and information dominance across the full spectrum of operations, including peace, conflict, war, and Overseas Contingency Operations (OCO). DCGS is a cooperative effort between the services, agencies, and DoD to provide systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms. DCGS-N core components include the analyst workstation from the Global Command and Control System (GCCS) - Integrated Imagery and Intelligence (I3), Generic Area Limitation Environment (GALE) Signals Intelligence (SIGINT), Common Geo-positioning Services (CGS), Image Product Library (IPL) or Information Store (iSToRE), Modernized Integrated Database (MIDB), Joint Concentrator Architecture (JCA) and Track Management Services (TMS).

The DCGS-N system represents the integration of 1) The processing and exploitation of tactical and Imagery Intelligence (IMINT) and SIGINT; 2) Precision target geopositioning, mensuration, and imagery dissemination capabilities; 3) Selected national IMINT requirements and processing capabilities from the National Geospatial-Intelligence Agency (NGA); and 4) Sharing of Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) and Command and Control information via DIB, DI2E, and Net-Centric Enterprise Services (NCES) standards with a wide range of customers (e.g., Global Command and Control System - Maritime (GCCS-M), Joint Mission Planning System (JMPS), and many others). The DCGS-N system efforts include investigation of emerging technologies through study, development, and associated testing for feasibility of program insertion.

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy	Date: March 2019
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305208N *I Distributed Common Ground Sys*

The DCGS-N Enterprise Node (DEN), which incorporates current DIB standards and DI2E policy, facilitates interoperability and data sharing among the DCGS FoS. DCGS-N ensures compliance with the DoD DCGS network architecture.

The Navy is establishing an ISR Enterprise way ahead that will emphasize a reach back strategy to provide intelligence products to support deployed ship and shore operations. The Navy will also migrate to a Service Oriented Architecture (SOA) that requires the integration and testing of a Maritime ISR Enterprise capabilities, migration of ISR applications to a SOA environment, and integration to leverage a Common Computing Environment (CCE) and the Intelligence Community Information Technology Enterprise (IC ITE). DCGS-N will also become the focal point for migration of Maritime Domain Awareness (MDA) fusion and analysis Maritime Fusion & Analysis (MFAS) tool applications for the Navy. Additionally, Intelligence Surveillance and Reconnaissance (ISR) funding supports development and integration efforts to fuse Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) data collected, exploited and disseminated by ISR systems with other intelligence data and automatically provide to shipboard combat systems to support kinetic (bombs, mortars, missiles, bullets) and non-kinetic fires (electronic attack, lasers, cyber-attack) and more effective exploitation of the electromagnetic spectrum. ISR systems will play key roles in enabling the national-to-tactical integration necessary for an integrated maritime targeting capability in support of kinetic and non-kinetic fires.

Distributed Common Ground System-Navy (DCGS-N) Increment 1 is the Navy's current in service DCGS ISR&T program of record. The system is actively used by Navy force level ships and shore sites in support of the mission. DCGS-N Increment 1 is currently performing technical refreshes to Windows 10 (WIN 10) per the Department of Defense's initiatives while enabling the long-term transition to DCGS-N Increment 2.

Intelligence Carry-On Program (ICOP) is a suite of multi-source intelligence and analytical capabilities which includes an integrated Three-Dimensional (3-D) operational picture displaying intelligence and other data sources to provide a richer and more complete picture of the battle space on Unit Level platforms. The system supports a full motion video capability that receives, processes, exploits, and disseminates organic and non-organic data as well as the ability to process and correlate Electronic Intelligence (ELINT) and external Communications Intelligence (COMINT Externals). It integrates mature Commercial Off-the-Shelf (COTS) and Government Off-the-Shelf (GOTS) applications with shared storage and communication paths to reach back to the DCGS-N Enterprise Node (DEN), and to provide data sharing to the Maritime Operations Centers (MOC) and national ISR systems, making tactical users a part of the larger ISR enterprise.

DCGS-N Increment 2 addresses a critical shortfall in Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) capability and capacity to support operational, tactical planning, and execution across the full range of joint military operations. Existing TCPED shortfalls will be exacerbated by planned Navy, Joint, and Allied fielding of new ISR platforms. Currently fielded systems provide localized processing capabilities that will be overwhelmed in future years without a significant change in the way the Navy processes, exploits and disseminates intelligence data. DCGS-N Increment 2 will perform quick and affordable integration of emergent transformational COTS and GOTS technologies in support of information warfare and overall efforts required to pace the threat. DCGS-N Increment 2 will deliver all source fusion and analytical capabilities; provide MDA capabilities and integrate TCPED capabilities to improve the use and analysis of sensor and platform data. DCGS-N Increment 2 will be based on an enterprise solution to share this information across commands, services, and agencies to promote shared situational awareness. DCGS-N Increment 2 consists of multiple releases. The first release (Fleet Capability Release 1 (FCR-1)) provides an enhanced Navy ISR enterprise that converges and builds on the DCGS-N Increment 1 Enterprise Node; leverages the Defense Intelligence Information Enterprise (DI2E); is compliant with the Common Computing Environment (CCE) and the Community Information Technology Enterprise (IC ITE); federates ISR and TCPED workflow and production; exploits new and evolving unmanned systems sensor data; provides Multi-Intelligence (Multi-INT) cross-queuing and modular tools. The second release (Fleet Capability Release

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Navy	Date: March 2019
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0305208N *I Distributed Common Ground Sys*

2 (FCR-2)), enhances afloat ISR capabilities by providing a set of software centric tools providing Multi-INT fusion and analysis, behavior prediction and intelligent knowledge management designed to operate in disconnected or denied communications environment. DCGS-N Increment 2 will insert new technology enhancements via incremental software & hardware upgrades and deliver as annual build release. Follow-on releases will be developed based on Fleet requirements.

B. Program Change Summary ($ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	46.150	42.846	41.474	-	41.474
Current President's Budget	40.150	42.846	0.000	-	0.000
Total Adjustments	-6.000	0.000	-41.474	-	-41.474
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	0.000	0.000	2.214	-	2.214
• Rate/Misc Adjustments	0.000	0.000	-43.688	-	-43.688
• Congressional Directed Reductions Adjustments	-6.000	-	-	-	-

Change Summary Explanation

Funding for projects 2174 and 2227 have been realigned out of PE 0305208N into PE 0304785N as part of Program Element Consolidation starting in FY20. Summaries located in PE 0304785N.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy												Date: March 2019
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305208N / *Distributed Common Ground Sys*				Project (Number/Name) 2174 / *Distributed Common Ground System-Navy (DCGS-N)*			
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**
2174: *Distributed Common Ground System-Navy (DCGS-N)*	206.841	0.325	0.222	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	207.388
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: MN40												

Note

Funding has been realigned out of PE 0305208N Project 2174, into PE 0304785N as part of RDTEN PE Consolidation starting in FY20.

A. Mission Description and Budget Item Justification

The Distributed Common Ground System - Navy (DCGS-N) is the Navy's portion of the Under Secretary of Defense, Intelligence (USD (I)) DCGS Family of Systems (FoS). The Department of Defense (DoD) has defined a DCGS architecture that will be compatible and interoperable across all of the Services' Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) systems and operations. DCGS accesses and ingests data from space borne, airborne, subsurface, and surface Intelligence, Surveillance, Reconnaissance (ISR) collection assets, intelligence databases and intelligence producers. This collected data is shared across a Joint enterprise using the DCGS Integration Backbone (DIB) and in time, the Defense Intelligence Information Enterprise (DI2E) to enhance access and sharing of ISR information across Joint forces through the use of common enterprise standards and services. DCGS FoS supports Joint Task Force (JTF)-level and below combat operations with critical intelligence for battle management and information dominance across the full spectrum of operations, including peace, conflict, war, and Overseas Contingency Operations (OCO). DCGS is a cooperative effort between the services, agencies, and DoD to provide systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms. DCGS-N core components include the analyst workstation from the Global Command and Control System - Maritime (GCCS-M) - Integrated Imagery and Intelligence (I3), Generic Area Limitation Environment (GALE) Signal Intelligence (SIGINT), Common Geo-positioning Services (CGS), Image Product Library (IPL), Modernized Integrated Database (MIDB), Joint Concentrator Architecture (JCA) and Track Management Services (TMS).

The DCGS-N system represents the integration of 1) The processing and exploitation of tactical and Imagery Intelligence (IMINT) and SIGINT; 2) Precision target geopositioning, mensuration, and imagery dissemination capabilities; 3) Selected national IMINT requirements and processing capabilities from the National Geospatial-Intelligence Agency (NGA); and 4) Sharing of Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) and Command and Control information via DIB, DI2E, and Net-Centric Enterprise Services (NCES) standards with a wide range of customers (e.g.,GCCS-M), Joint Mission Planning System (JMPS), and many others). The DCGS-N efforts include investigation of emerging technologies through study, development, and associated testing for feasibility of program insertion.

The DCGS-N Enterprise Node (DEN), which incorporates current DIB standards and DI2E policy, facilitates interoperability and data sharing among the DCGS FoS. DCGS-N ensures compliance with the DoD DCGS network architecture.

The Navy is establishing an ISR Enterprise way ahead that will emphasize a reach back strategy to provide intelligence products to support deployed ship and shore operations. The Navy will also migrate to a Service Oriented Architecture (SOA) that requires the integration and testing of Maritime ISR Enterprise capabilities,

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** 2174 / *Distributed Common Ground System-Navy (DCGS-N)*

migration of ISR SOA applications, integration to leverage a Common Computing Environment (CCE) and the Intelligence Community Information Technology Enterprise (IC ITE). Additionally, DCGS-N will become the focal point for migration of Maritime Domain Awareness (MDA) fusion and analysis Maritime Fusion & Analysis (MFAS) tool applications for the Navy.

Distributed Common Ground System-Navy (DCGS-N) Increment 1 is the Navy's current in service DCGS ISR&T program of record. The system is actively used by Navy force level ships and shore sites in support of the mission. Program is currently performing technical refreshes to Windows 10 per the Department of Defense's initiatives while enabling the long-term transition to DCGS-N INC 2.

Intelligence Carry-On Program (ICOP) is a suite of multi-source intelligence and analytical capabilities which includes an integrated Three-Dimensional (3-D) operational picture displaying intelligence and other data sources to provide a richer and more complete picture of the battle space on unit level platforms. The system supports a full motion video capability that receives, processes, exploits, and disseminates organic and non-organic data as well as the ability to process and correlate Electronic Intelligence (ELINT) and external Communications Intelligence (COMINT Externals). It integrates mature Commercial Off-the-Shelf (COTS) and Government Off-the-Shelf (GOTS) applications with shared storage and communication paths to reach back to the DCGS-N Enterprise Node (DEN), and to provide data sharing to the Maritime Operations Centers (MOC) and national ISR systems, making tactical users a part of the larger ISR enterprise.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Distributed Common Ground System-Navy (DCGS-N) Increment 1	0.325	0.222	0.000	0.000	0.000
Articles:	-	-	-	-	-

FY 2019 Plans:
In FY19, DCGS-N Increment 1 will continue development, integration and regression testing that is required to remain aligned with emerging national imagery standards for tech refreshes and End-of-Life Upgrades.

FY 2020 Base Plans:
FY20 funding has been realigned into PE 0304785N Project 2174 as part of PE Consolidation.

FY 2020 OCO Plans:
N/A

FY 2019 to FY 2020 Increase/Decrease Statement:
Program decrease is due to realigning funds as part of PE Consolidation. FY20 justification and change explanation is provided under 0304785N Project 2174.

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** 2174 / *Distributed Common Ground System-Navy (DCGS-N)*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Distributed Common Ground System - Navy (DCGS-N) Increment 1's $0.089 million decrease from FY19 to FY20 is a result of efficiencies, Common Geospatial Services (CGS), and associated systems engineering services.					
Accomplishments/Planned Programs Subtotals	0.325	0.222	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN 2914: *Distributed Common Ground System-Navy (DCGS-N)*	19.012	10.219	21.788	-	21.788	22.422	17.307	17.565	17.953	212.550	594.942

Remarks

0305208N/2914 is a shared Program Element (PE) with Distributed Common Ground System-Navy (DCGS-N) Increment 1, Increment 2, and Intelligence Carry-On Program (ICOP)

D. Acquisition Strategy

DCGS-N Family of Systems (FoS) program utilizes mature Commercial-Off-The-Shelf (COTS) and Governmental-Off-The-Shelf (GOTS) capabilities. The Navy adapts and integrates these capabilities and ensures interoperability with the DCGS Integration Backbone (DIB) standards and Defense Intelligence Information Enterprise (DI2E) policies. Integration of DCGS-N Increment 1 components has transitioned from Government-led to Industry-led based on the award of DCGS-N Increment 1 Prime Mission Product (PMP) contract.

Intelligence Carry-On Program (ICOP) implements a cross-decking methodology that incorporates a two phased delivery, a permanent foundation kit which supports carry-on equipment to include workstation and CM3 antenna / receiver set. This methodology supports speed-to-fleet principles.

E. Performance Metrics

DCGS-N Increment 1 Goal: Meet national imagery standards.
DCGS-N Increment 1 Metric: Support development, integration and regression testing required to align with emerging national imagery standards.

ICOP Goal: Support unit-level Intelligence Surveillance Reconnaissance (ISR) processing, exploitation and dissemination for Surface Operations.
ICOP Metric: Rapidly employ new capabilities to deliver to first available afloat platform after receipt of successful test event / report.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208N / *Distributed Common Ground Sys*	Project (Number/Name) 2174 / *Distributed Common Ground System-Navy (DCGS-N)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Product Development Prior Years	Various	Various : Various	122.440	0.000		0.000		0.000		-		0.000	0.000	122.440	-
Integration Assembly & Test	C/CPFF	NSWC China Lake : China Lake, CA	0.593	0.315	Mar 2018	0.180	Jan 2019	0.000		-		0.000	0.000	1.088	-
Government Technical Oversight (Dev)	WR	SSC LANT : Charleston, SC	0.391	0.010	Jan 2019	0.042	Jan 2019	0.000		-		0.000	0.000	0.443	-
		Subtotal	123.424	0.325		0.222		0.000		-		0.000	0.000	123.971	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support Prior Years	Various	Various : Various	45.769	0.000		0.000		0.000		-		0.000	0.000	45.769	-
		Subtotal	45.769	0.000		0.000		0.000		-		0.000	0.000	45.769	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test & Evaluation Prior Years	Various	Various : Various	26.470	0.000		0.000		0.000		-		0.000	0.000	26.470	-
		Subtotal	26.470	0.000		0.000		0.000		-		0.000	0.000	26.470	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Management Services Prior Years	Various	Various : Various	11.178	0.000		0.000		0.000		-		0.000	0.000	11.178	-
		Subtotal	11.178	0.000		0.000		0.000		-		0.000	0.000	11.178	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208N / *Distributed Common Ground Sys*	Project (Number/Name) 2174 / *Distributed Common Ground System-Navy (DCGS-N)*	

	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	206.841	0.325		0.222		0.000		-		0.000	0.000	207.388	N/A

Remarks

FY20 cost data is provided under PE 0304785N Project 2174.

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** 2174 / *Distributed Common Ground System-Navy (DCGS-N)*

CLASSIFICATION:

EXHIBIT R4, Schedule Profile

APPROPRIATION/BUDGET ACTIVITY	PROJECT NUMBER AND NAME
RDT&E, N / BA-7	2174 Distributed Common Ground System – Navy (DCGS-N)

Fiscal Year	2018				2019			
2174 DCGS-N	1	2	3	4	1	2	3	4
DCGS-N Increments 1 Tech Refresh	FOL/ECP/FC As Req				FOL/ECP/FC As Req			

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** 2174 / *Distributed Common Ground System-Navy (DCGS-N)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2174				
DCGS-N Increment 1 Tech Refresh	1	2018	4	2019

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy												Date: March 2019
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305208N / *Distributed Common Ground Sys*				Project (Number/Name) *2227 / Distributed Common Ground System (DCGS-N) Inc 2*			
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**
2227: *Distributed Common Ground System (DCGS-N) Inc 2*	64.353	39.825	42.624	0.000	-	0.000	0.000	0.000	0.000	0.000	130.708	277.510
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: M464

Note

Funding has been realigned out of PE 0305208N Project 2227, into PE 0304785N as part of RDTEN PE Consolidation starting in FY20.

Cost-To-Complete reflects Distributed Common Ground System - Navy (DCGS-N) Increment 2 only. DCGS-N Increment 2 reflects Department of Navy Component Cost Position (CCP).

A. Mission Description and Budget Item Justification

Distributed Common Ground System-Navy (DCGS-N) Increment 2 addresses a critical shortfall in Tasking, Collection, Processing, Exploitation, and Dissemination (TCPED) capability and capacity to support operational, tactical planning, and execution across the full range of joint military operations. Existing TCPED shortfalls will be exacerbated by planned Navy, Joint, and Allied fielding of new ISR platforms. Currently fielded systems provide localized processing capabilities that will be overwhelmed in future years without a significant change in the way the Navy processes, exploits and disseminates intelligence data. DCGS-N INC 2 will perform technical analyses and engineering efforts associated with implementation of new technology to enable rapid introduction of new products and technology, prevent obsolescence, and end of support issues. DCGS-N Increment 2 will deliver all source fusion and analytical capabilities; provide Maritime Domain Awareness (MDA) capabilities and integrate TCPED capabilities to improve the use and analysis of sensor and platform data. DCGS-N Increment 2 will be based on an enterprise solution to share this information across commands, services, and agencies to promote shared situational awareness. DCGS-N Increment 2 consists of multiple releases. The first release (Fleet Capability Release 1 (FCR-1)) provides an enhanced Navy ISR enterprise that converges and builds on the DCGS-N Increment 1 and MDA Enterprise Nodes; leverages the Defense Intelligence Information Enterprise (DI2E); is compliant with the Common Computing Environment (CCE) and the Community Information Technology Enterprise (IC ITE); federates ISR and TCPED workflow and production improving throughout the automation; exploits new and evolving unmanned systems sensor data; provides Multi-Intelligence (Multi-INT) cross-queuing and modular tools. The second release (Fleet Capability Release 2 (FCR-2)), enhances afloat ISR capabilities by providing a set of software centric tools providing Multi-INT fusion and analysis, behavior prediction and intelligent knowledge management designed to operate in disconnected or denied communications environment. Follow-on releases will be developed in a threat based approach pacing advances in ISR data, analytics, and mission to meet fleet requirements.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Title: Distributed Common Ground System-Navy (DCGS-N) Increment 2	39.825	42.624	0.000	0.000	0.000
Articles:	1	1	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
FY 2019 Plans: In FY19, DCGS-N Increment 2 will conduct the Fielding Technical Review and Fielding Decision Review of Fleet Capability Release 1 (FCR-1) which comprises the ashore backbone of the Navy's Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) enterprise and will contain enterprise data and analytics, and synchronize the Common Intelligence Picture across the Fleet. This portion of the DCGS-N Increment 2 system will support future test events. DCGS-N Increment 2 will complete integration of Fleet Capability Release 2 (FCR-2) which comprises the afloat nodes of the Navy's ISR&T enterprise. DCGS-N Increment 2 will conduct an In Progress Test Review and Integrated Test of the FCR-2 build including rigorous cyber security testing. DCGS-N Increment 2 will continue to develop a standard software baseline for the DCGS Family of Systems (FoS), and will complete integration capabilities in Fleet Capability Release 2 (FCR-2), and begin integration of capabilities in Fleet Capability Release 3 (FCR-3). DCGS-N Increment 2 will begin planning for Fleet Capability Release 4 (FCR-4) including developing the Requirements Definition Package (RDP), preparing for the Build Technical Review and Build Decision. DCGS-N Increment 2 will develop one (1) unit for Initial Operational Test and Evaluation (IOT&E) hardware design and acquisition. DCGS-N Increment 2 will continue Passive Targeting Efforts leveraging Office of Naval Research (ONR) Electromagnetic Battle Management (EMBM) Future Naval Capabilities (FNC) to network and fuse Passive Targeting Data. ***FY 2020 Base Plans:*** FY20 funding has been realigned into PE 0304785N Project 2227 as part of PE Consolidation. ***FY 2020 OCO Plans:*** N/A ***FY 2019 to FY 2020 Increase/Decrease Statement:*** Program decrease is due to realigning funds as part of PE Consolidation. FY20 justification and change explanation is provided under 0304785N Project 2227. Overall, funding for project 2227 from FY19 to FY20 increased $0.374 million to support additional security architecture requirements for the integration of kinetic and non-kinetic fires. Additionally, the FY20 funding request was reduced by $1.736 million to account for the availability of prior year execution balances.					
Accomplishments/Planned Programs Subtotals	39.825	42.624	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• OPN 2914: *Distributed Common Ground System-Navy (DCGS-N)*	19.012	10.219	21.788	-	21.788	22.422	17.307	17.565	17.953	212.550	594.942

Remarks

0305208N/2914 is a shared Program Element (PE) with Distributed Common Ground System - Navy (DCGS-N) Increment 1, Increment 2, and Intelligence Carry-On Program (ICOP).

D. Acquisition Strategy

The Distributed Common Ground System-Navy (DCGS-N) Increment 2 acquisition is based on the Department of Defense Instruction (DODI) 5000.02, Model 3, for incrementally fielded software intensive programs.

E. Performance Metrics

DCGS-N Increment 2 Goal: Support afloat forces through a robust enterprise Intelligence Surveillance, Reconnaissance and Targeting (ISR&T) capability, satisfying maritime needs for processing, exploitation and dissemination.

DCGS-N Increment 2 Metric: Will complete integration capabilities Field Fleet Capability Release 3 (FCR-3) and begin integration of capabilities in Fleet Capability Release 4 (FCR-4).

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Integration Assembly & Test	WR	SSC PAC : San Diego, CA	14.110	29.680	Oct 2017	31.465	Oct 2018	0.000		-		0.000	61.145	136.400	-
Primary Hardware Development	WR	SSC PAC : San Diego, CA	11.481	3.780	Nov 2017	2.199	Nov 2018	0.000		-		0.000	5.979	23.439	-
Software Development	WR	SSC PAC : San Diego, CA	28.052	0.000		0.000		0.000		-		0.000	0.000	28.052	-
Integration Assembly & Test	C/CPFF	SSC LANT : Charleston, SC	0.000	0.000		1.664	Nov 2018	0.000		-		0.000	1.664	3.328	-
Software Development	WR	SSC LANT : Charleston, SC	1.635	0.000		0.000		0.000		-		0.000	0.000	1.635	-
Government Technical Oversite (Dev)	WR	SSC LANT : Charleston, SC	0.409	0.780	Nov 2017	1.387	Nov 2018	0.000		-		0.000	2.167	4.743	-
		Subtotal	55.687	34.240		36.715		0.000		-		0.000	70.955	197.597	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	C/CPFF	SAIC : Columbia, MD	1.288	2.041	Mar 2018	1.741	Mar 2019	0.000		-		0.000	3.782	8.852	-
Development Support	WR	SSC LANT : Charleston, SC	0.300	0.171	Nov 2017	0.171	Nov 2018	0.000		-		0.000	0.342	0.984	-
Integrated Logistics Support	WR	SSC LANT : Charleston, SC	0.500	0.053	Nov 2017	0.053	Nov 2018	0.000		-		0.000	0.106	0.712	-
Integrated Logistics Support	C/CPFF	SAIC : Columbia, MD	1.545	0.330	Mar 2018	0.330	Dec 2018	0.000		-		0.000	0.660	2.865	-
		Subtotal	3.633	2.595		2.295		0.000		-		0.000	4.890	13.413	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208N / *Distributed Common Ground Sys*	Project (Number/Name) *2227 / Distributed Common Ground System (DCGS-N) Inc 2*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	C/CPFF	SAIC : Columbia, MD	0.417	0.265	Mar 2018	0.265	Dec 2018	0.000		-		0.000	0.530	1.477	-
Developmental Test & Evaluation	WR	SSC LANT : Charleston, SC	0.537	0.240	Nov 2017	0.561	Nov 2018	0.000		-		0.000	0.801	2.139	-
Developmental Test & Evaluation	C/CPFF	JITC : Fort Meade, MD	0.800	0.100	May 2018	0.208	Dec 2018	0.000		-		0.000	0.308	1.416	-
Developmental Test & Evaluation	C/CPFF	COTF : Norfolk, VA	0.386	0.420	Feb 2018	0.420	Nov 2018	0.000		-		0.000	0.840	2.066	-
		Subtotal	2.140	1.025		1.454		0.000		-		0.000	2.479	7.098	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018 Cost	FY 2018 Award Date	FY 2019 Cost	FY 2019 Award Date	FY 2020 Base Cost	FY 2020 Base Award Date	FY 2020 OCO Cost	FY 2020 OCO Award Date	FY 2020 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Travel	Allot	SPAWAR : San Diego, CA	0.356	0.240	Dec 2017	0.240	Nov 2018	0.000		-		0.000	0.480	1.316	-
Government Engineering Support	WR	SSC LANT : Charleston, SC	0.308	0.200	Nov 2017	0.200	Nov 2018	0.000		-		0.000	0.400	1.108	-
Program Management Support	C/CPFF	BAH : San Diego, CA	1.179	1.010	Mar 2018	1.150	Nov 2018	0.000		-		0.000	2.160	5.499	-
Program Management Support	WR	SSC LANT : Charleston, SC	0.650	0.290	Nov 2017	0.290	Nov 2018	0.000		-		0.000	0.580	1.810	-
Program Management Support	WR	SSC PAC : San Diego, CA	0.400	0.225	Oct 2017	0.280	Nov 2018	0.000		-		0.000	0.505	1.410	-
		Subtotal	2.893	1.965		2.160		0.000		-		0.000	4.125	11.143	N/A

	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	64.353	39.825		42.624		0.000		-		0.000	82.449	229.251	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Navy			Date: March 2019
Appropriation/Budget Activity 1319 / 7	R-1 Program Element (Number/Name) PE 0305208N / *Distributed Common Ground Sys*	Project (Number/Name) *2227 / Distributed Common Ground System (DCGS-N) Inc 2*	

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

FY20 cost data is provided under PE 0304785N Project 2227.

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

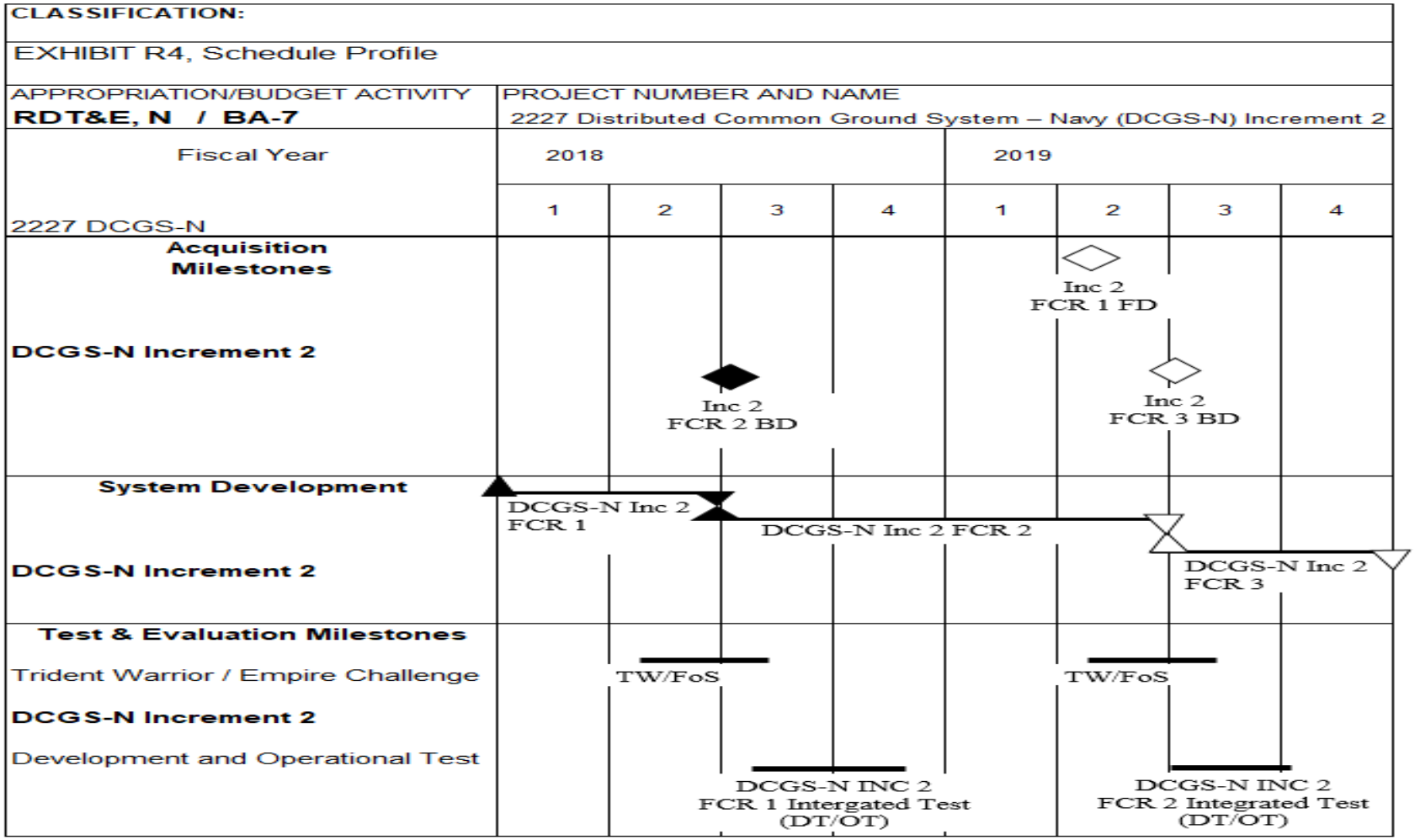

Exhibit R-4A, RDT&E Schedule Details: PB 2020 Navy		Date: March 2019
Appropriation/Budget Activity 1319 / 7	**R-1 Program Element (Number/Name)** PE 0305208N / *Distributed Common Ground Sys*	**Project (Number/Name)** *2227 / Distributed Common Ground System (DCGS-N) Inc 2*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2227				
DCGS-N Inc 2 FCR-2 Build Decision (BD)	3	2018	3	2018
DCGS-N Inc 2 FCR-1 Fielding Decision (FD)	2	2019	2	2019
DCGS-N Inc 2 FCR-3 Build Decision (BD)	3	2019	3	2019
DCGS-N Inc 2 FCR-1 Development	1	2018	2	2018
DCGS-N Inc 2 FCR-2 Development	2	2018	2	2019
DCGS-N Inc 2 FCR-3 Development	2	2019	4	2019
Trident Warrior/DCGS Family of Systems (FoS) 2018	2	2018	3	2018
DCGS-N Inc 2 FCR-1 Integrated Test (DT/OT)	3	2018	4	2018
Trident Warrior/DCGS Family of Systems (FoS) 2019	2	2019	3	2019
DCGS-N Inc 2 FCR-2 Integrated Test (DT/OT)	3	2019	4	2019