Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy												Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 8: *Software and Digital Technology Pilot Programs*					R-1 Program Element (Number/Name) PE 0608113N *I NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*							
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	0.000	955.151	-	955.151	-	-	-	-	-	-
2901: *Navy Enterprise IT*	0.000	0.000	0.000	955.151	-	955.151	-	-	-	-	-	-
Program MDAP/MAIS Code: **Project MDAP/MAIS Code(s):** MN61												

Note

Funding in PE 0608113N transferred from OMN BSIT PE 0208550N, OPN BLI 8164 and RDTEN PE 0605013N Project 2901. NGEN funding under PE 0608113N in FY22 is not a new start.

A. Mission Description and Budget Item Justification

Section 872 of the National Defense Authorization Act (NDAA) for FY 2018 (P.L. 115-91) directed the Secretary of Defense to task the Defense Innovation Board (DIB) to undertake a study on "streamlining [the Department's] software development and acquisition regulations." The Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) submitted the final report to Congress in May 2019. The DIB's report made recommendations aimed at transforming the way the Department acquires, develops, and deploys software and manages digital talent. The DIB encouraged the creation of a "new appropriation category for software capability delivery that allows (relevant types of) software to be funded as a single budget item, with no separation between RDT&E, production and sustainment." The recommendation stemmed from the DIB's observation that current law, regulations, and policies (including those governing program funding and appropriations) treat software acquisition and development as a series of discrete, sequential steps; and that this approach is at odds with modern software, which is continuously updated to provide new functionality. This program has been designated as a Software and Digital Technology Pilot Program by the Secretary of Defense or the explanatory statement regarding this Act. The funding in this line is requested to be used for expenses necessary for agile procurement, production, modification and operation and maintenance of the pilot program requirements.
This is not a new start program. Funds have been realigned from the following budget lines:

OMN BSIT PE 0208550N
OPN BLI 8164
RDTEN 0605013N Project 2901

Next Generation Enterprise Network (NGEN): NGEN is the acquisition program for Navy Marine Corps Intranet (NMCI) and Outside the Continental United States (OCONUS) Navy Enterprise Network (ONE-Net). NGEN provides secure, net-centric data and information technology (IT) capabilities and services in support of up to 800,000 United States Navy (USN) warfighters and end users. NGEN provides core IT-based network transport, compute, storage, end-user, mobility, systems integration, service desk, and computer network operations and defense services. The program provides an modernized enterprise approach to deliver a fully integrated, interoperable, and secure networking platform. The network has begun transformation and modernization efforts towards a commercial standard approache to improve end-user experience and application performance, enabling optimal consumption of cloud-based services, allowing for greater accessibility to critical data;

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy	Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 8: *Software and Digital Technology Pilot Programs*	**R-1 Program Element (Number/Name)** PE 0608113N *I NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*

expanding the mobile platform; and shifting to a framework that emphasizes "data protection" as a fundamental element of cybersecurity. Once the convergence of NMCI and ONE-Net is complete, the Navy will have a single Navy Enterprise Network (NEN).

COVID19 pandemic drove a major shift and pivot in the 5 year transformation plan. Rapid expansion of the network infrastructure was necessary to meet Navy's telework demands. Major expansion of Virtual Private Network was necessary from 3 to 5 sites (capacity increased to 140,000 concurrent users); Outlook Web Access expanded to support 300,000 users; and Microsoft O365 limited rate deployment expanded to accelerate 160,000 users. The redirection of priorities and acceleration required the update of circuit infrastructure to 10G. ONE-Net VPN capacity increased to support 32,000+ users.

The Navy Digital Platform (NDP) is a modern digital platform that encompasses optimal cloud consumption, domain singularity, mobility, resilience, and enhanced security. The modernized platform is on parity with industry, which is ready to meet changing mission needs and achieve competitive Naval advantage through a constant state of Information Readiness. This multi-year effort and investment is needed to finalize and adjudicate a Target Enterprise Architecture (TEA), identify obsolescent technologies associated with Navy network platforms, and aid in the integration of users and services, implement enabling business processes and service management frameworks, and provide sustaining activity guidance for future investment areas across all classification levels and operating environments.

Current on-premise infrastructure must transform and evolve to a future cloud native environment to enable the warfighter to access data across multiple domains. The modernization of Next Generation Enterprise Network is the critical path in designing the Navy Digital Platform. Through recapitalization of applicable legacy hardware and converging network infrastructure toward a cloud native design, Next Generation Enterprise Network will reduce the need for constant platform (base, ship, mobile device) reconfiguration and ensure the end-user receives current capabilities required to perform job functions at various classification levels. Multifactor authentication and centralized management of user personas enables zero-trust based cyber security from the onset of system development throughout the entire lifecycle. Uniform enterprise security controls across the system lifecycle ensures consistency across the development, testing, and operational phases deployment workflow thus reducing rework. The flattened network design will enable contracting and acquisitions to quickly deploy solutions from the labs to the user community in near real-time.

Using a rapid systems engineering approach, the Next Generation Enterprise Network will leverage leading industry experts to design and execute a transformative architecture across the spectrum of services. Driving towards the design of the Navy Digital Platform and digital business and service delivery, the NGEN-R family of contracts were awarded. The End-User Hardware Services (EUHW) was awarded on October 8, 2019 without protest. The Service Management, Integration and Transport (SMIT) was awarded on February 5, 2020.

Exhibit R-2, RDT&E Budget Item Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319: *Research, Development, Test & Evaluation, Navy I* BA 8: *Software and Digital Technology Pilot Programs*	R-1 Program Element (Number/Name) PE 0608113N *I NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	

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	955.151	-	955.151
Total Adjustments	0.000	0.000	955.151	-	955.151
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Rate/Misc Adjustments	0.000	0.000	955.151	-	955.151

Change Summary Explanation

FY22 increase from FY21 due to the transfer from BA 1, OMN Enterprise Information Technology (BSIT), BA 5 PE 0605013N Project 2901 Navy Enterprise Service Tools (NEST), and BA 7 OPN Next Generation Services (8164) to RDTEN BA 8, Next Generation Enterprise Network (NGEN) Pilot Program as part of the Software Funding Pilot Program. Budget Activity 8 BA-08 within Research, Development, Test and Evaluation (RDT&E) is intended to evaluate the effectiveness of a single budget appropriation for Software and Digital Technology that encompasses development, implementation, fielding, and sustainment.

As compared to the previous FY21 budget lines, the FY22 NGEN reflects a net increase of $254.1M due to the following:
- Network Management decrease of ($7.89M)as a result of realigning compliance based tech refresh efforts under Transformation in FY22;
- Enterprise Software Management increase of $124.05M for Microsoft Licenses to include newly added security baseline; Cybersecurity increase of $12.00M for the addition of NetScout, ForeScout and Verodin capability;
- Information Transport decrease of ($60.90M) as a result of realigning compliance based tech refresh efforts under Transformation in FY22;
- Non-IT Infrastructure increase of $3.90M in order to replace UPS batteries and upgrade HVAC units, fan replacements and UPS capacitors;
- Cloud Services increase of $57.90M in order to support M365 stand up and operations for 472,000 users accelerated by COVID-19 pandemic;
- Transformation increase of $125.00M required to transform the Navy Enterprise Networks and solve the security and technology improvement efforts, such as systems/security engineering and integration, production, installation and implementation of network infrastructure, in support of merging ONE-Net and NMCI operating models.

FY21 NGEN $701.1M budgeted across appropriations OMN, OPN and RDTEN BA05. Appropriations breakout follows:
- FY21 $526.1M budgeted in OMN BSIT PE 0208550N: Network Management $367.8M, Enterprise Software Management $120.0M, Cybersecurity $22.8M, Information Transport $13.9M, Non-IT Infrastructure $1.6M, Cloud Services $0, Transformation $0. (In FY21 a portion of Network Management and Information Transport is realigned to Transformation in FY22.)

- FY21 $173.2M budgeted in OPN BLI 8164: Network Management $77.1M, Cybersecurity $17.5M, Information Transport $73.0M, Cloud Services $5.6M, Transformation $0.0
- FY21 $1.8M budgeted in RDTEN 0605013N Project 2901: Network Management $1.8M

FY22 NGEN $955.2M previously funded in OMN, OPN and RDTEN. Appropriations breakout follows.
- FY22 $778.0M budgeted in OMN BSIT PE 0208550N: Network Management $409.6M, Enterprise Software Management $244.1M, Cybersecurity $39.3M, Information Transport $19.0M, Non-IT Infrastructure $5.5M, Cloud Services $60.5M, Transformation $0.
- FY22 $175.0M budgeted in OPN BLI 8164: Network Management $27.0M, Cybersecurity $13.0M, Information Transport $7.0M, Cloud Services $3.0M, Transformation $125.0M
- FY22 $2.2M budgeted in RDTEN 0605013N Project 2901: Network Management $2.2M

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy												Date: May 2021
Appropriation/Budget Activity 1319 / 8					R-1 Program Element (Number/Name) PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*				Project (Number/Name) 2901 / *Navy Enterprise IT*			
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**
2901: *Navy Enterprise IT*	0.000	0.000	0.000	955.151	-	955.151	-	-	-	-	-	-
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		
Project MDAP/MAIS Code: MN61												

A. Mission Description and Budget Item Justification

The NGEN-R Service Portfolio represents a flexible and agile IT approach, using an architecture and service strategy aligned with commercial best practices. The new service delivery approach features diverse sourcing, leveraging of cloud/web-scale infrastructure and software-defined flexibility, which the Navy will seek to take advantage of in
the EUHW and SMIT contracts. In FY 2022, NEN will implement a technical enterprise architecture that replaces obsolete technologies associated with NMCI and ONE-Net platforms, integrate rationalized users and services, implement enabling business processes and service management frameworks and provide guidance for future investment areas across all classification levels and operating environments. This includes network modeling & simulation, performance-based prototypes and applied research in future technologies affecting network architectures to advance the state of networks across all domains.

Key objectives of the modernization approach include the broad implementation of these IT towers and services:

1. Network Management: IT Operation supports the delivery of fully integrated, interoperable, and secure networking platform for both CONUS & OCONUS. Develops and maintains business processes and incorporate innovative tools and applications in order to support the transformation into a digital business and a service delivery environment critical to maintaining a competitive advantage against arising global threats.

2. Enterprise Software Management: Management of IT core build and cloud software products and licensing agreements that are contractually negotiated in order to grant the end user the use and rights of the product needed to operate and execute the mission both ashore and afloat.

3. Cybersecurity: Employment of the full litany of technical cyber security controls both CONUS & OCONUS that ensure adherence to DoD mandated security controls for the Naval Enterprise Network. NetScout, ForeScout, Splunk & Verodin consists of a comprehensive cybersecurity framework of tools which provide protections for advanced endpoint asset management, enhanced network access control, malware detection, and the ability to respond to threats in near real-time that are used to support endpoint configuration baselines and compliance across thousands of endpoints.

4. Information Transport: Eradicates technical debt for unclassified transport boundaries that will increase port connectivity for users from 100M to 1G user ports, and from 1G to 10G bandwidth to Data Centers/Transport Boundaries.

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

5. Non-IT Infrastructure: Comprised of capital equipment that directly supports NEN's IT components and infrastructure throughout CONUS. This property is owned by the Navy, just as the NEN network is, and includes systems such as data center Uninterruptible Power Supplies (UPSs) and batteries, rack-mounted UPSs and batteries, emergency power generating equipment including fossil fuel tanks, and Heating, Ventilation and Cooling (HVAC) systems.

6. Cloud Services: Cloud-based software-as-as-service (SaaS) offering that replaces on-premise e-mail infrastructure and additionally offers capabilities like Teams, Skype, and SharePoint Online.

7. Transformation: The current infrastructure is aged and modernization is essential to improve storage capabilities to accommodate new emerging workforce requirements, maintain network performance, architecture/solution accreditations, and network security. A significant amount of those assets have reached end-of-life and are no longer supported by the vendors, which makes the infrastructure vulnerable to external cyber-attacks; and diminishes enterprise solutions performance and optimization.

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Title: Network Management	0.000	0.000	438.801	0.000	438.801
Articles:	-	-	-	-	-
Description: Network Management: ($438.801) Provides service management of Infrastructure as a Service (IaaS) usage and network utilization. Obtains end user computing devices consisting of physical and virtual device endpoints that allows administrators and end users to access digital data, voice, and video services. Delivers enterprise messaging; information technology service management (ITSM); systems engineering, test and installation services; data center operations; enterprise tools management and training. Manages network services by controlling and reducing network traffic, internet bandwidth in order to reduce congestion latency and packet loss, and determine causes of network congestion. Acquires warranties and engineering efforts towards enterprise mobility expansion, manages legacy network consolidation/above network base operational requirements, and integrates enterprise service tools that facilitate the full service lifecycle management of IT customer service requests. Supplies a robust service desk that allows a single point of contact for all end users who require assistance in resolving service disruptions, disseminates communication of changes, maintenance windows, emergencies and other various events affecting the tenant consumed services. Service desk is the focal point for troubleshooting user concerns and provides remediation actions to the engineering team for correction. Integrates tools for Application Performance Monitoring for all services and systems to include desktop systems (physical and virtual), server systems (physical and virtual) encompassing on-premises legacy environment and					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
IaaS and PaaS environments, and network services to provide monitoring and management for availability and performance to detect and diagnose potential problems in order to maintain the expected level of service for the user and environment. This is essential for ensuring customer satisfaction and system performance validation, and will aid in the mission goals of the service desk and full end to end support for root cause analysis. ***FY 2021 Plans:*** FY21 Network Management Requirements ($446.7M) were funded under OMN BSIT ($367.8M), OPN LI 8164 ($77.1M) and RDTEN PE 0605013N Project 2901 ($1.8M). ***FY 2022 Base Plans:*** FY22 Network Management Requirements ($438.8M) effort previously funded appropriations: OMN BSIT ($409.6M), OPN LI 8164 ($27.0M) and RDTEN PE 0605013N Project 2901 ($2.2M) 1. Ongoing operation and management support for Information Technology Service Management (ITSM); Systems Engineering, Test and Installation Services; Data Center Operations; Enterprise Tools Management; Training; Enterprise Mobility; and Tier 1-3 Service Desk. 2. Acquire warranty renewals for Non-Secure Internet Protocol Router (NIPR)/Secret Internet Protocol Router (SIPR) WANX, Intrusion Prevention System (IPS), Outlook Web Access (OWA), Reliability Availability Serviceability (RAS), Web Services, Enterprise Wireless Local Area Network (WLAN), Bluecoat, Clearpass (TACACS), Public Key Infrastructure (PKI), and other Equipment/Infrastructure. 3. Develop a fundamental element of cybersecurity data protection framework. 4. Commence migration toward a unified shore and tactical edge afloat network. 5. Expand the mobile platform and implement a technical enterprise architecture that replaces obsolete technologies associated with NMCI and ONE-Net platforms. 6. Establish business processes and service management frameworks by conducting network modeling & simulation, performance-based prototypes and applied research in rapid technological advancements. 7. Complete of Navy ePS implementation interface. 8. Continue NMCI software licensing and operating system reporting. 9. Modernize user interface across NEST applications. 10. Commence implementation of Remedy NET Interface (RNI) computed radiography (CR)/ digital radiography (DR) for USMC EUHWaaS strategy. 11. Generate PDS via MuleSoft to accommodate frequent protective distribution system (PDS) schema upgrades.					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
12. Develop a role to support Tier 2 helpdesk functions. 13. Upgrade Procure to Pay to maintain DoD compliance. 14. Breakdown MuleSoft middleware into independent package for expedited interface updates. 15. Complete Virtual Host Technical Refresh Exchange 2019. 16. Complete H: Drive Migration and VMWare Upgrade. 17. Complete Windows as a Service (WaaS) and engineering to server 2016 / Azure. 18. Complete Project Keystone and identify Wireless LAN engineering solution. 19. iOS 15 testing, approval, and implementation for Blackberry UEM On Premise. ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Network Management net decrease from FY21 by -$7.9M is primarily attributed to the realignment of compliance based tech refresh requirements ($57M budgeted in FY21) to Transformation in FY22 as compliance based tech refresh is a critical component to start Transformation efforts. The decrease is offset by a corresponding increase in fixed costs by $50M under Network Management for both CONUS and OCONUS (FY22 $242M, FY21 $192M) due to the new contract structure.					
Title: Enterprise Software Management	0.000	0.000	244.050	0.000	244.050
Articles:	-	-	-	-	-
Description: Enterprise Software Management: ($244.05) Navy Enterprise Networks (NEN) will acquire software utilizing the current DON Enterprise Software License (ESL) program to the maximum extent. The ESL software agreements will enable commercial-off-the-shelf (COTS) software (SW) licensing by the Government. NEN will utilize the DON ESL team, Enterprise Information Technology Strategic Sourcing (EITSS) program office, as the DON Software Strategic Sourcing office to meet NGEN-R requirements through the DON ESL Program. The DON software requirements may be satisfied with open source products software available for free from other government contracts, licenses provided to the NGEN-R contractors as GFE, and SW provided to the DON as a part of a service or supply delivered by the NGEN-R contractors. Pre-loaded core build software products on all CONUS & OCONUS devices to include Validation Authority Desktop Validators, Winzip, Actividentity Activeclient Advanced (NIPR), 90meter (SIPR), Change Auditor, Hp					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Records Manager, Universal, Discovery inventory, Client Automation, Pulse Secure, Terrago toolbar, native encryption management. Winzip, Remedy, Kelverion, Bluecoat, Commvault, Thales Security, SolarWinds, Riverbed WANX, Java Server, CISCO SmartNet, F5 and MS Server Licenses Cloud based Microsoft 365 (M365) subscription/license to provide Office and other productivity apps, cloud services, device management, and Navy security baseline (Lighthouse, Sentinel, AADP2, MDE, MDO, and EMSE3) with InTune. Microsoft licensing assumes a new cost structure based on personas for 472,000 end users. ***FY 2021 Plans:*** FY21 Enterprise Software Management Requirements ($120.0M) were funded under OMN BSIT. ***FY 2022 Base Plans:*** FY22 Enterprise Software Management Requirements ($244.05M) effort previously funded appropriation: OMN BSIT 1. Acquire pre-loaded core build / network software license renewals on all CONUS & OCONUS devices to include Validation Authority Desktop Validators, Winzip, Actividentity Activeclient Advanced (NIPR), 90meter (SIPR), Change Auditor, Hp Records Manager, Universal, Discovery inventory, Client Automation, Pulse Secure, Terrago toolbar, native encryption management. Winzip, Remedy, Kelverion, Bluecoat, Commvault, Thales Security, SolarWinds, Riverbed WANX, Java Server, CISCO SmartNet, F5 and MS Server Licenses. 2. Acquire 472,000 Microsoft software license reinstatement and renewals for M365 (EMS E3/E5), Windows (Win10 & WinE3), and DoD plus the Navy Security Baseline (Lighthouse, AADP2, MDE, MDO, Sentinel, InTune). ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Enterprise Software Management increase from FY21 by $124.05M due to Microsoft Licenses to include newly added security baseline. Microsoft amended license pricing structure to include persona base pricing per user					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
vice historical priced by seat. FY22 includes increased users from 345,000 users to 472,000 users and provides the mandated DoD security plus Navy baseline requirements for all 472,000 users.					
Title: Cybersecurity	0.000	0.000	52.300	0.000	52.300
Articles:	-	-	-	-	-
Description: Cybersecurity: ($52.30) Comprehensive Cybersecurity framework tools consist of NetScout, ForeScout, Splunk & Verodin which provide protections for advanced endpoint asset management, enhanced network access control, malware detection, and the ability to respond to threats in near real-time that are used to support endpoint configuration baselines and compliance across thousands of endpoints. NetScout is a system for supporting unified network management across geographic regions and diverse transports (e.g., Wide Area Networks (WAN), Local Area Networks (LAN), and peer networks). NetScout system components include real-time dashboards, servers, deployment agents, taps, data collectors, and analytics engines. Netscout will facilitate enterprise visibility and service assurance. It provides Layer 2-7 real-time visibility into networks, applications and services. It also inspects traffic (deep packet inspection), captures data and forensics, supports data analytics, anomaly detection and performance discovery. Netscout also supports troubleshooting and predictions of network performance. Forescout hardware and software provides enhanced network access controls, providing authentication for the network and orchestrating the NEN security component to support the DoD CIO Pathfinder Comply-to-Connect (C2C) effort. The solution provides network operators with the ability to scan, quarantine, and remediate endpoints that are out of compliance before allowing connection to the network. Failure or immediate shutdown / disconnection of solution would result in a denial of service for endpoint devices and server connections to the NEN switching network. Splunk provides the ability to perform investigations based on log records and provides U.S. Fleet Cyber Command/Commander, U.S. Tenth Fleet, Naval Network Warfare Command and Navy Cyber Defense Operations Command with real-time SA on network activity, events, status, and availability. The solution supports the DoD CIO Pathfinder C2C effort and provides compliance with INFOCON data retention requirements.					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Verodin hardware, software, and warranty to deliver the DoD CIO Pathfinder Comply to Connect (C2C) and Situational Awareness effort. Verodin is used to validate security policies and configurations. Results are used to inform network maneuvers to increase security as well as confirm desired effect of such network maneuvers. C2C supports the Enterprise-wide Navy Cyber Situational Awareness (NCSA) and integrated Common Operational Picture (COP) initiative through an enterprise log management platform that provides a "single pane of glass" to view and respond to near real-time security intelligence, incident detection, investigations, continuous monitoring, alerting and analytic collected from security and event information data feed sources. (Server/Workstation Hardening, Authentication and Authorization, Network Compartmentalization, Quarantine and Isolation and Auto Remediation capabilities) ***FY 2021 Plans:*** FY21 Cybersecurity requirements ($40.3M) were funded under OMN BSIT ($22.8M) and OPN LI 8164 ($17.5M). ***FY 2022 Base Plans:*** FY22 Cybersecurity requirements ($52.3M) effort previously funded appropriations: OMN BSIT ($39.3M) and OPN LI 8164 ($13.0M) 1. Execute engineering, integration, implementation of software upgrade to the latest DISA approved version for Host Based Security System (HBSS). 2. Execute engineering, integration, implementation for replacement of existing McAfee sensors with Cisco Firepower for Intrusion Prevention System (IPS). 3. Execute Assured Compliance Assessment Solution (ACAS) engineering, integration, implementation and procure hardware for infrastructure expansion (i.e., add additional servers) and enhancement to comply with FLTCYBERCOM EXORD 20-064 seven (7) day scan frequency requirement. 4. Execute engineering, integration, and implementation replacement of Windows 10 BitLocker key management transition from McAfee Management of Native Encryption (MNE) (ePO,HBSS) to Microsoft Endpoint Configuration Manager (MECM) for Data-at-Rest. 5. Execute engineering, integration, and deploy and sustain Microsoft Defender on all endpoints. 6. Manage Risk Management Framework (RMF) - the Authority-to-Operate (ATO) package assembly, review and processing as Information Systems Security Engineer (ISSE0, Validators, Security Control Assessor (SCA) Liaisons, Navy Authorizing Official (NAO) CSA Liaisons, and Package Submitting Office (PSO) pending full-					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Service Management, Integration and Transport (SMIT) execution when Validation will be assumed by the SMIT Service Provider. 7. Execute engineering, integration, and implementation infrastructure re-design expansion, and replace end of life hardware for ForeScout CounterAct. 8. Execute engineering, integration, and implementation to upgrade the operating system and application software, renew software licensing, and procure additional hardware to support more data ingest for Splunk. 9. Manage software/hardware warranties, and technical support for Verodin. ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Cybersecurity increase from FY21 by $12.0M due to the addition of NetScout, ForeScout and Verodin capability.					
Title: Information Transport	0.000	0.000	26.000	0.000	26.000
Articles:	-	-	-	-	-
Description: Information Transport: ($26.00) Technical debt eradication is essential for users to maximize benefits from M365/Cloud migration. Applies Network and Platform Enabling Core Service Architecture providing a connection between circuit and user's building infrastructure. Excludes voice, video, and data upgrades and requires site surveys to determine infrastructure and configuration upgrades. Upgrade to B1 boundaries that allows rapid improvements to enable full use of the Navy's cloud application/services and start on the path of Naval IT transformation and JRSS integration; understanding the issues related to "Return to Work" driven by the COVID-19 pandemic. OCONUS M365 planning and infrastructure upgrades develops the connection between circuit and user's building infrastructure, including voice, video, data upgrades, and site surveys to determine infrastructure and configuration upgrades. ***FY 2021 Plans:*** FY21 Information Transport requirements ($86.9M) were funded under OMN BSIT ($13.9M) and OPN LI 8164 ($73.0M). ***FY 2022 Base Plans:*** FY22 Information Transport requirements ($26.0M) effort previously funded appropriations: OMN BSIT ($19.0M) and OPN LI 8164 ($7.0M)					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
1g Complete B-1 Remediation initiatives in Norfolk, Bremerton, Pearl Harbor, Jacksonville, and San Diego Nano Technology Infrastructure (SDNI). 2. Continue technical refresh modernization program; complete projects and enterprise transport implementations to buy down technical debt. ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Information Transport decrease from FY21 by ($60.9M) due to a result of Transformation beginning in FY22 and the realignment of compliance based tech refresh efforts under Transformation in FY22. Compliance based tech refresh is a critical component to start Transformation efforts.					
Title: Non-IT Infrastructure	0.000	0.000	5.500	0.000	5.500
Articles:	-	-	-	-	-
Description: Non-IT Infrastructure: ($5.50) Uninterruptible Power Supplies (UPS)- There are thousands of rack-mounted UPSs and batteries in the NEN enterprise which provide back-up, conditioned power to the network transport sector equipment housed all over the United States. Reliable functional backup power is critical to providing uninterrupted services to users. Due to the age of the UPS units, material is no longer in production to support repair so replacement is necessary at a number of sites across the enterprise. Replaces the UPS Capacitor, HVAC Unit, and fan replacement necessary to ensure the smooth and reliable operation of the UPS. Repairs are critical to avoid loss of power to IT equipment throughout the enterprise. Emergency Power Generation - Major NEN sites are those which have data centers and/or server farms. Such sites require back-up power capability for potentially longer periods of time than the temporary power UPS units can support. Diesel generators and fuel tanks are located at many of these sites to ensure NEN operations are not interrupted in the event of a long-term power interruption. Many of these generators are past their service life and the fuel tanks connected to them are in disrepair. HVAC systems - Wherever NEN gear is in operation, heat management is critical. Temperatures at server farms and data centers must be kept at constant levels to avoid the risks associated with IT equipment shutdown					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
because of excessive temperatures. Many HVAC systems are past their service life and need complete replacement. In particular, the systems at Norfolk and Patuxent River are years past their service life. ***FY 2021 Plans:*** FY21 Non-IT Infrastructure Requirements ($1.6M) were funded under OMN BSIT. ***FY 2022 Base Plans:*** FY22 Non-IT Infrastructure Requirements ($5.5M) effort previously funded appropriation: OMN BSIT 1. Replace the UPS capacitor and fans for Lakehurst, San Diego Nano Technology Infrastructure, Fallon, and Philadelphia Navy Business Center. 2. Replace five HVAC compressors for Chinalake. 3. Replace server farm UPS batteries and ATS-A Utility breaker for Lakehurst. 4. Replace the generator transformer and control panel for Philadelphia. 5. Full HVAC replacement for Norfolk, Pax River, SPSC, Carderock, LRNX, Gulfport. 6. Replace HVAC CRAC compressor for Mechanicsburg, Pax River, Jacksonville, and Charleston. 7. Replace HVAC Chiller compressor for Washington Navy Yard. ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Non-IT Infrastructure increase from FY21 by $3.9M due to the need to replace UPS batteries and upgrade HVAC units, fan replacements and UPS capacitors.					
Title: Cloud Services	0.000	0.000	63.500	0.000	63.500
Articles:	-	-	-	-	-
Description: Cloud Services: ($63.50) M365 is Microsoft's cloud-based software-as-as-service (SaaS) offering that replaces on-premise e-mail infrastructure and additionally offers a suite of capabilities like Teams, Skype, and SharePoint Online. The Navy is migrating to Microsoft (MS) 365 (M365) suite of tools to enable productivity services for mobile and teleworking users across the network. M365 suite of services will enhance the Navy's cyber security posture by maturing its Zero Trust principle adoption. Engineering and Support Services are required to architect,					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
design, implement and operate advanced security, automation and collaboration features needed to provide more flexible access to Microsoft Azure and M365 while users are operating both off and on the DoD networks. Zero Trust configuration will allow users to have a similar O365 productivity service experience from either the workplace or off-premises/remote work. This foundation of M365, Azure identity and security services will position the Navy to achieve digital transformation and future application integration as part of the larger Navy cloud migration strategy with IT Service Management tool- Digital Marketplace. This provides O365, zero trust, end point management, identity, automation, and direct internet access to 472,000 Navy users. ***FY 2021 Plans:*** FY21 Cloud Services requirements ($5.6M) were funded under OPN LI 8164. ***FY 2022 Base Plans:*** FY22 Cloud Services requirements ($63.5M) effort previously funded appropriations: OMN BSIT ($60.5M) and OPN LI 8164 ($3.0M) 1. Complete data migration (e-mail, personal storage, shared storage) 2. Begin consolidation of service desk functions across multiple vendors 3. Fully implement Digital Marketplace for customer engagement and management ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Cloud Services increase from FY21 by $57.9M due to support M365 stand up and operations of critical help desk capability, transition and automate IT Service Management service delivery for 472,000 users accelerated by COVID-19 pandemic.					
Title: Transformation ***Articles:*** ***Description:*** Transformation: ($125.00) Planning for Network Transformation and Modernization (NTM) is the key to executing network optimization, improving efficiency of services, and enhancing network design that meets the Navy's future warfighting and business needs for Global Service Delivery, Mission Assurance, and Navy Private Cloud. The NTM process will provide input into the NTM Plan to deliver proof of value to the Naval network continuously for every initiative	0.000 -	0.000 -	125.000 -	0.000 -	125.000 -

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
from early analysis through final selection. The NTM process provides mission-driven transformation and modernization through enterprise upgrades and assessment of operational organizational impacts to minimize network service disruption. The NTM process provides data driven intelligence through modeling and simulation reducing early-in-lifecycle documentation and capacity, demand, and "operational cost of device failure" analytics. The NTM process provides open enterprise solution through frameworks and API-based technologies and proactively identifies new defensive cybersecurity initiatives which assesses potential attacks, vulnerabilities, and threats in technology refresh and NTM initiatives to continually reduce the NEN attack surface. The NTM process follows an 11 step process to identify technical initiatives to ensure that enterprise solutions align with NEN operational and business goals, develops and measures standardized, repeatable transformation framework processes, conducts technical reconnaissance to identify transformation initiatives that maximize value & benefit to DON, leads engineering analyses, NTM artifact development. 1) Perform Assessment of Current/Predicted State Operations and Analyze Service Gaps 2) Research Technology and Industry Forecasts 3) Develop Transformation Technology Roadmap 4) Research Technology and Industry Forecasts 5) Analyze T/M Candidate Initiatives and Initial Down-select 6) Create Alternative T/M Solutions 7) Recommend Optimized T/M Project Collections and Generate NT/MP 8) Create AoA 9) Create BCA 10) Create Technical Assessment 11) Create Project Plan NTM provides government council through industry-recognized IT experts and CTOs across NEN-relevant services and technologies that identify transformation initiatives ("realm of the possible"); forecast technology and business adoption, sun-setting trends, and costs; understand potential IT enterprise and organizational change impacts; and understand how and when to apply new technologies to NEN. NTM provides a value engineering team that assists government stakeholders in developing or updating VDF benefit dimensions and weights, assesses initiative solution options, reviews project collections' "Hall of Fame" VDF results, and reviews project results against predictions.					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
Long-term strategy for Transformation will focus on infrastructure to increase bandwidth and deliver Software Defined Networking (SDN), enable easy maintenance and updates of enterprise QoS policy. Modernization to upgrade to SD-WAN, enabling us to manage resources dynamically to maintain performance, enable user self-provisioning for future infrastructure services for multiple hypervisors/containers and public and/or DoD cloud platforms and cloud-enabled IPN/ISN lays the foundational elements for cloud-based infrastructure and orchestrated provisioning suitable for integration into our Storefront. Automation and Orchestration of tasks such as configuration, coordination, and management of SW interactions in cloud computing environments ***FY 2021 Plans:*** N/A ***FY 2022 Base Plans:*** FY22 Transformation ($125.0M) effort previously defined appropriation: OPN LI 8164 ($125.0M) 1. Develop the Network Modernization and Transformation Plan to include modernizing legacy platforms and upgrade network infrastructure to deliver a modern end user experience. 2. Assess the life-cycle costs of the recommended technology and provide the costs for new investments, changes, or modifications to new and existing systems. 3. Identify all non-IT assets that support IT operations. 4. Identify potential changes to ITSM processes as a result of NT/MP activities. 5. Identify reductions in infrastructure that may result from NT/MP activities or consolidation/off-loading of services. 6. Identify reductions in Contractor and Government human resources as a result of NT/MP activities of consolidation/offloading of services. ***FY 2022 OCO Plans:*** N/A ***FY 2021 to FY 2022 Increase/Decrease Statement:*** Transformation increase of $125M is attributed to the realignment of compliance based tech refresh requirements from Network Management ($36M in FY22) and Information Transport ($66M in FY22). Remaining increase is driven by the requirement to transform the Navy Enterprise Networks and solve the					

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

B. Accomplishments/Planned Programs ($ in Millions, Article Quantities in Each)	FY 2020	FY 2021	FY 2022 Base	FY 2022 OCO	FY 2022 Total
security and technology improvement efforts, such as systems/security engineering and integration, production, installation and implementation of network infrastructure.					
Accomplishments/Planned Programs Subtotals	0.000	0.000	955.151	0.000	955.151

C. Other Program Funding Summary ($ in Millions)

Line Item	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
• O&M,N/BSIT: *BSIT NEN*	0.000	526.100	0.000	-	0.000	-	-	-	-	-	-
• OP,N/8164: *8164 NEN*	0.000	173.224	0.000	-	0.000	-	-	-	-	-	-
• RDT&E,N/0605013N: *0605013N Project 2901*	0.000	1.800	0.000	-	0.000	-	-	-	-	-	-

Remarks

-FY21 OMN Breakout is as follows:
Network Management $367.8M
Enterprise Software Management $120.0M
Cybersecurity $22.8M
Information Transport $13.9M
Non-IT Infrastructure $1.6M
Cloud Services $0

-FY21 OP,N breakout is as follows:
Network Management $77.1M
Cybersecurity $17.5M
Information Transport $73.0M
Cloud Services $5.6M
Transformation $0.0

-FY21 RDT&E,N breakout is as follows:
Network Management $1.8M

-Grand Total of $701.1M for FY21

Exhibit R-2A, RDT&E Project Justification: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

D. Acquisition Strategy

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Fixed Costs	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		253.100	Oct 2021	-		253.100	-	-	-
Cybersecurity	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		37.500	Dec 2021	-		37.500	-	-	-
Network Operations and Maintenance	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		52.910	Dec 2021	-		52.910	-	-	-
Circuits	MIPR	DISA : Belville, IL	0.000	0.000		0.000		13.000	Jun 2022	-		13.000	-	-	-
Enterprise Software Licenses	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		9.000	Nov 2021	-		9.000	-	-	-
Enterprise Software Licenses	WR	NIWC PAC : San Diego	0.000	0.000		0.000		8.300	Nov 2021	-		8.300	-	-	-
Microsoft Licenses	C/BPA	Microsoft : Reston, VA	0.000	0.000		0.000		226.750	May 2022	-		226.750	-	-	-
M365 Operations and Maintenance	C/BPA	Microsoft : Reston, VA	0.000	0.000		0.000		9.000	Nov 2021	-		9.000	-	-	-
M365 Operations and Maintenance	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		8.000	Nov 2021	-		8.000	-	-	-
M365 Operations and Maintenance	WR	NIWC LANT : Charleston, SC	0.000	0.000		0.000		21.500	Nov 2021	-		21.500	-	-	-
Compliance Based Technical Refresh	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		43.300	Apr 2022	-		43.300	-	-	-
Transformation	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		89.100	Feb 2022	-		89.100	-	-	-
		Subtotal	0.000	0.000		0.000		771.460		-		771.460	-	-	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Award Fee	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		30.000	Sep 2022	-		30.000	-	-	-
Cybersecurity Engineering Support	C/CPFF	Falconwood : Arlington, VA	0.000	0.000		0.000		1.800	May 2022	-		1.800	-	-	-
Logistics Support	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		5.500	Dec 2021	-		5.500	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy			Date: May 2021
Appropriation/Budget Activity 1319 / 8	R-1 Program Element (Number/Name) PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	Project (Number/Name) 2901 / *Navy Enterprise IT*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Support	C/CPFF	2 Twelve : Reston, VA	0.000	0.000		0.000		4.300	Dec 2021	-		4.300	-	-	-
Engineering Support	C/CPIF	Leidos : Reston, VA	0.000	0.000		0.000		35.900	Nov 2021	-		35.900	-	-	-
Engineering Support	C/CPFF	Falconwood : Arlington, VA	0.000	0.000		0.000		16.786	May 2022	-		16.786	-	-	-
Engineering Support	WR	NIWC LANT : Charleston, SC	0.000	0.000		0.000		13.200	Oct 2021	-		13.200	-	-	-
Engineering Support	WR	NIWC PAC : San Diego, CA	0.000	0.000		0.000		22.704	Oct 2021	-		22.704	-	-	-
M365 Operations and Maintenance	WR	CFFC : Various	0.000	0.000		0.000		18.000	Nov 2021	-		18.000	-	-	-
M365 Operations and Maintenance	C/BPA	Microsoft : Reston, VA	0.000	0.000		0.000		4.000	Nov 2021	-		4.000	-	-	-
Engineering Support	C/CPFF	Deloitte : McLean, VA	0.000	0.000		0.000		2.200	Jun 2022	-		2.200	-	-	-
		Subtotal	0.000	0.000		0.000		154.390		-		154.390	-	-	N/A

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Support	C/CPFF	Booz Allen Hamilton : McLean, VA	0.000	0.000		0.000		17.000	May 2022	-		17.000	-	-	-
Program Support BFM	C/CPFF	Booz Allen Hamilton : McLean, VA	0.000	0.000		0.000		2.500	Sep 2022	-		2.500	-	-	-
Program Support	C/CPFF	Broadleaf : Manassas, VA	0.000	0.000		0.000		3.100	Mar 2022	-		3.100	-	-	-
Program Support	C/CPFF	Tecolote : Chantilly, VA	0.000	0.000		0.000		1.100	Jun 2022	-		1.100	-	-	-
Program Supt	WR	Various : Various	0.000	0.000		0.000		5.601	Oct 2021	-		5.601	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2020 Cost	FY 2020 Award Date	FY 2021 Cost	FY 2021 Award Date	FY 2022 Base Cost	FY 2022 Base Award Date	FY 2022 OCO Cost	FY 2022 OCO Award Date	FY 2022 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.000	0.000		0.000		29.301		-		29.301	-	-	N/A

	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		955.151		-		955.151	-	-	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

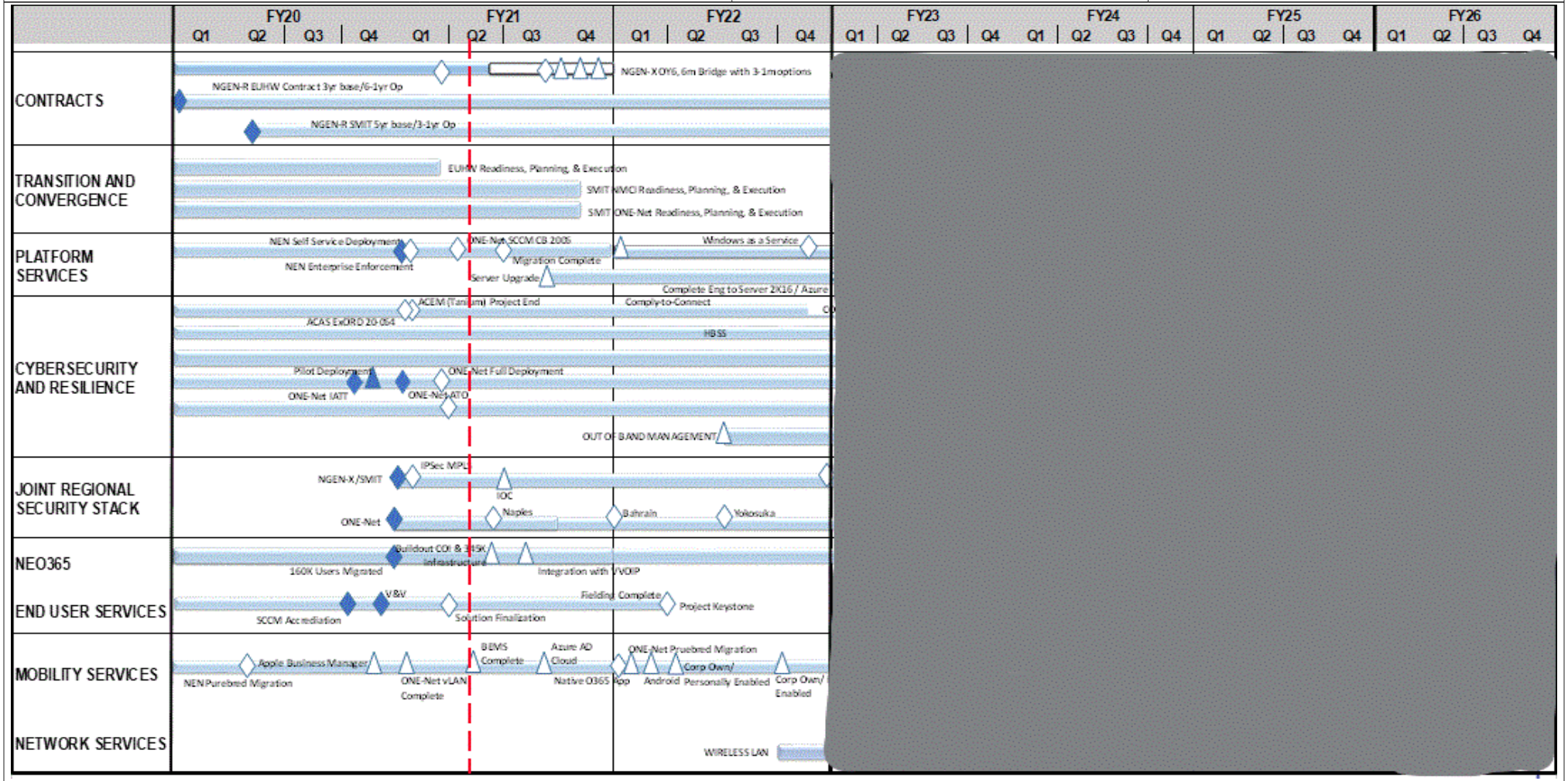

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Proj 2901				
Network Management: Mobile Platform Expansion	1	2021	4	2022
Network Management: Virtual Host Technical Refresh Exchange 2019	1	2021	4	2022
Network Management: Project Keystone	1	2020	2	2022
Network Management: H Drive Migration and VMWare Upgrade	1	2020	4	2022
Network Management: Windows as a Service (WaaS) and engineering to server 2016 / Azure	1	2020	4	2022
Network Management: Navy ePS implementation interface	1	2020	4	2022
Enterprise Software Management: Acquire pre-loaded core build	1	2022	4	2022
Enterprise Software Management: Acquire 472,000 Microsoft license renewals	1	2022	1	2022
Cybersecurity: Engineering, integration implementation software upgrade for HBSS	1	2022	4	2022
Cybersecurity: Engineering integration implementation for replacement of existing McAfee sensors with Cisco Firepower for IPS	1	2022	4	2022
Cybersecurity: Manage software/hardware warranties, and technical support for Verodin	1	2022	4	2022
Information Transport: B-1 Remediation initiatives in Norfolk, Pearl Harbor, Jacksonville, and San Diego Nano	1	2022	4	2022
Information Transport: Technical Refresh modernization program	1	2022	4	2022
Non-IT Infrastructure: Replace the UPS capacitor and fans for Lakehurst, San Diego Nano Technology Infrastructure, Fallon, and Philadelphia	1	2022	4	2022
Non-IT Infrastructure: Replace the generator transformer and control panel for Philadelphia.	1	2022	4	2022
Non-IT Infrastructure: Replace HVAC CRAC compressor for Mechanicsburg, Pax River, Jacksonville, and Charleston.	1	2022	4	2022

Exhibit R-4A, RDT&E Schedule Details: PB 2022 Navy		Date: May 2021
Appropriation/Budget Activity 1319 / 8	**R-1 Program Element (Number/Name)** PE 0608113N / *NEXT GEN ENTERPISE NET'K (NGEN) SOFTWARE PLT PG*	**Project (Number/Name)** 2901 / *Navy Enterprise IT*

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Non-IT Infrastructure: Replace HVAC Chiller compressor for Washington Navy Yard.	1	2022	4	2022
Cloud Services: Data migration (e-mail, personal storage, shared storage)Detail	1	2022	4	2022
Cloud Services: Fully implement Digital Marketplace for customer engagement and management	1	2022	4	2022
Transformation: Assessment of Current/Predicted State Operations and Analyze Service Gaps	1	2022	4	2022
Transformation: Develop Transformation Technology Roadmap	1	2022	4	2022
Transformation: Analyze T/M Candidate Initiatives and Initial Down-select	1	2022	4	2022