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Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604771D8Z I <i>Joint Tactical Information Distribution System (JTIDS)</i>
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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	101.070	24.268	34.425	40.102	-	40.102	26.718	15.819	16.027	16.283	Continuing	Continuing
<i>771: Link-16 Tactical Data Link (TDL) Transformation</i>	92.650	19.268	20.207	12.563	-	12.563	11.976	12.789	13.037	13.230	Continuing	Continuing
<i>105: Cyber Capability & Platform Resilience</i>	8.420	5.000	14.218	12.539	-	12.539	4.742	3.030	2.990	3.053	Continuing	Continuing
<i>028: DIB Secure Cloud Managed Services Pilot</i>	0.000	0.000	0.000	15.000	-	15.000	10.000	0.000	0.000	0.000	Continuing	Continuing

Note

19.503

A. Mission Description and Budget Item Justification

Mission Description and Budget Item Justification: The Joint Tactical Information Distribution Systems (JTIDS) program supports collaborative efforts to achieve strategy-driven capability development spanning the suite of Department enablers and programs to include Communications and Networks, Cyber, Command and Control (C2), space, Nuclear Command, Control, and Communications (NC3), and technology within the Assistant Secretary of Defense Acquisition Portfolio. JTIDS also supports matters relating to acquisition and the integration and protection of technology that enable capability for the warfighter, including cross-cutting functional capabilities that advance the acquisition enterprise, drive innovative acquisition approaches, policy, acquisition management, advanced software acquisition, and business/financial management. These efforts include conducting mission informed capability-based analysis; portfolio assessments to include analyzing modernization trends that result in the development of roadmaps or business area strategies that support balanced investment decisions; and monitoring and assessing Major Defense Acquisition Programs(MDAPs) , Major Automated Information Systems (MAIS), and defense Business Systems in a capability portfolio context. Activities in the JTIDS include (1) mission informed capability-based analysis; (2) Interoperability & Integration; (3) roadmap development and support to business area strategies; and (4) support tools and guidance; (5) Innovative Acquisition Approaches, (6) Software acquisition, and (7) advanced acquisition software and software provenance. JTIDS also enables cross-department collaboration to enable enterprise-wide approaches. JTIDS also enables cross-department collaboration to enable enterprise-wide approaches. This includes: (1) vertical and horizontal integration activities within the Department and with the interagency where appropriate; (2) engaging in a coordinated portfolio-based approach to planning, programming, budgeting and execution; and (3) reform efforts at the legislative, governance, policy, management and execution levels. JTIDS is focused on capabilities-based portfolio management of the Department's key enablers, thus there are many shared equities with in ASD(A) and across OSD. To fully meet mission need the JTIDS program supports extensive collaboration with required alliances and with other OSD PSA's.

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B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	15.358	19.503	21.803	-	21.803
Current President's Budget	24.268	34.425	40.102	-	40.102
Total Adjustments	8.910	14.922	18.299	-	18.299
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	9.500	5.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.560	-			
• FFRDC	-0.030	-0.078	-	-	-
• Congressional Add - Managed Secure Cloud Pilot for DIB	-	-	15.000	-	15.000
• Congressional Add - NC3 Governance	-	-	4.000	-	4.000
• Biological and Chemical Threats Preparedness	-	-	-0.701	-	-0.701
• Increase for Cyber	-	10.000	-	-	-

Change Summary Explanation

FY20 and 21 increase for Managed secured cloud for DIB and for NC3 Governance. Decrease for INV-D-032 CDBP - Biological and Chemical Threats Preparedness.

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Appropriation/Budget Activity 0400 / 5					R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>				Project (Number/Name) 771 / <i>Link-16 Tactical Data Link (TDL) Transformation</i>			
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
<i>771: Link-16 Tactical Data Link (TDL) Transformation</i>	92.650	19.268	20.207	12.563	-	12.563	11.976	12.789	13.037	13.230	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Mission Description and Budget Item Justification: The Joint Tactical Information Distribution Systems (JTIDS) program supports collaborative efforts to achieve strategy-driven capability development spanning the suite of Department enablers and programs to include Communications and Networks, Cyber, Command and Control (C2), space, Nuclear Command, Control, and Communications (NC3), and technology within the Assistant Secretary of Defense Acquisition Portfolio. JTIDS also supports matters relating to acquisition and the integration and protection of technology that enable capability for the warfighter, including cross-cutting functional capabilities that advance the acquisition enterprise, drive innovative acquisition approaches, policy, acquisition management, advanced software acquisition, and business/financial management. These efforts include conducting mission informed capability-based analysis; portfolio assessments to include analyzing modernization trends that result in the development of roadmaps or business area strategies that support balanced investment decisions; and monitoring and assessing Major Defense Acquisition Programs (MDAPs), Major Automated Information Systems (MAIS), and defense Business Systems in a capability portfolio context. Activities in the JTIDS include (1) mission informed capability-based analysis; (2) Interoperability & Integration; (3) roadmap development and support to business area strategies; and (4) support tools and guidance; (5) Innovative Acquisition Approaches, (6) Software acquisition, and (7) advanced acquisition software and software provenance. JTIDS also enables cross-department collaboration to enable enterprise-wide approaches. JTIDS also enables cross-department collaboration to enable enterprise-wide approaches. This includes: (1) vertical and horizontal integration activities within the Department and with the interagency where appropriate; (2) engaging in a coordinated portfolio-based approach to planning, programming, budgeting and execution; and (3) reform efforts at the legislative, governance, policy, management and execution levels. JTIDS is focused on capabilities-based portfolio management of the Department's key enablers, thus there are many shared equities with in ASD(A) and across OSD. To fully meet mission need the JTIDS program supports extensive collaboration with required alliances and with other OSD PSA's.

B. Accomplishments/Planned Programs (\$ in Millions)

Title: Common Joint Tactical Information Initiatives	FY 2018	FY 2019	FY 2020
	19.268	20.207	12.563
Description: Mission Description and Budget Item Justification: The Joint Tactical Information Distribution Systems (JTIDS) program supports collaborative efforts to achieve strategy-driven capability development spanning the suite of Department enablers and programs to include Communications and Networks, Cyber, Command and Control (C2), space, Nuclear Command, Control, and Communications (NC3), and technology within the Assistant Secretary of Defense Acquisition Portfolio. JTIDS also supports matters relating to acquisition and the integration and protection of technology that enable capability for the warfighter, including cross-cutting functional capabilities that advance the acquisition enterprise, drive innovative acquisition approaches, policy, acquisition management, advanced software acquisition, and business/financial management. These efforts include conducting mission informed capability-based analysis; portfolio assessments to include analyzing modernization trends that result in the development of roadmaps or business area strategies that support balanced investment decisions; and monitoring			

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
<p>and assessing Major Defense Acquisition Programs(MDAPs) , Major Automated Information Systems (MAIS), and defense Business Systems in a capability portfolio context. Activities in the JTIDS include (1) mission informed capability-based analysis; (2) Interoperability & Integration; (3) roadmap development and support to business area strategies; and (4) support tools and guidance; (5) Innovative Acquisition Approaches, (6) Software acquisition, and (7) advanced acquisition software and software provenance. JTIDS also enables cross-department collaboration to enable enterprise-wide approaches. JTIDS also enables cross-department collaboration to enable enterprise-wide approaches. This includes: (1) vertical and horizontal integration activities within the Department and with the interagency where appropriate; (2) engaging in a coordinated portfolio-based approach to planning, programming, budgeting and execution; and (3) reform efforts at the legislative, governance, policy, management and execution levels. JTIDS is focused on capabilities-based portfolio management of the Department's key enablers, thus there are many shared equities with in ASD(A) and across OSD. To fully meet mission need the JTIDS program supports extensive collaboration with required alliances and with other OSD PSA's.</p> <p>FY 2019 Plans:</p> <ul style="list-style-type: none"> - Common Data Link (CDL) Principal Staff Assistant: Continue to coordinate with CDL Executive Agent (EA) to develop and maintain a technology roadmap and terminal database to improve interoperability, configuration management, and focused technology investments. Continue implementation and oversight of an enterprise transition strategy to modernize DoD ISR waveforms to converge on a DoD standard for tactical ISR communications. Update CDL technology development roadmap to reflect current trends in technology that can add enhanced capabilities to CDL systems. Continue planning and conduct of CDL SRP and IPT meetings to develop and refine the CDL investment portfolio and to identify strategic ISR communications issues the DoD will face in the future. Conduct analysis of Airborne ISR communications transport infrastructure in coordination with Joint Staff, Services and Combatant Commands in order to identify a way ahead for establishing an effective/efficient global enterprise capability. Conduct annual CDL enterprise modernization analysis and review Service PPBE submissions to assess enterprise migration to Bandwidth Efficient CDL by 2023. Continue to promote open system development solutions that expand the vendor base and allow increased competition and innovation. Expand the CDL Reference Implementation Laboratory concept of a government owned technical baseline while assessing a Common Development Environment that encourages rapid develop, testing, and fielding of new capabilities. - Acquisition Management and Oversight: Provide technical assistance in developing IT related acquisition policy, including updates to DoD Series 5000 necessitated by changes in statue, regulation and management direction. Provide technical assessments and programmatic recommendations across DASD functional areas to address interoperability gaps and work early in the systems engineering. - FAB-T: Support IOT&E execution. Work to assure the program has a successful LRIP-2 decision. Continue to support PNVC integration and test. Provide risk assessments of system integration into the various airborne, ground fixed and ground transportable systems prior to installation. Support implementation of additional reliability testing to provide increased data for program acquisition and operational decisions. 			

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
<ul style="list-style-type: none"> - Wideband SATCOM AoA: Complete AoA assessing material solutions for WGS replenishment and for supporting other traditional commercial supplied users considering life-cycle cost, performance, suitability, operational effectiveness, and resiliency. Provide final report to D, CAPE for sufficiency review and work with GAO on Congressionally directed review. - Evolved AEHF / AEHF: Provide programmatic analysis, technical reviews, and assessments of the Evolved AEHF and AEHF programs to reduce development, integration, and procurement risks. Provide risk assessments as the program continues to launch spacecraft and improve the Mission Planning Element. Work to support efforts for the Evolved AEHF and assess implementation of XDR and PTW waveforms on new satellite payload and bus. - Mid-Term Polar SATCOM (MPS) / EPS: Provide programmatic analysis, technical reviews, and assessments of the MPS and EPS programs to reduce development, integration, and procurement risks. Assess risk as the TT&C system is integrated and tested prior to operations. Work to support and assess efforts for the follow-on MPS system, whether as a hosted payload or a free flyer. - MUOS capable terminals: Support FOT&E execution. Provide analysis, technical assessments and fielding reviews for implementing the MUOS capability. Work to support the certification of ground, maritime and airborne terminals, and testing required to enable operational authorizations. - Joint Tactical Networking Center (JTNC): Provide technical and programmatic analysis to support the Defense Acquisition Executive's role as the co-chair of the JTNC Board of Directors (BoD). Provide Secretariat functions for the JTNC BoD. - All former JTRS(HMS, MNVR, AMF, JTN)Programs – Upon request, provide technical expertise and recommendations to facilitate program compliance with IT related acquisition policy, in accordance with DoD Series 5000 and applicable Milestone Decision Authority direction. Provide programmatic recommendations regarding cost/schedule/performance tradeoffs and application of evolving acquisition policies, based on lessons observed in oversight of acquisition programs across the Department. - Ground Tactical Networks Advanced Capabilities: Mature narrowband dismounted communications capability with radio hardware prototype, robust modeling and simulation, and reusable waveform software code. Form industry engagement to promote transition into non-developmental item radios. - Integrated Electromagnetic Spectrum Operations (EMSO): Track implementation of iEMSO strategy in radio and EW device development plans. Assess and down-select technical interoperability and architectural approaches. Ensure adequate funding and testing to assess maturity of solutions. Develop science and technology roadmap to synchronize transition of key technologies to programs of record for spectrum-dependent systems. FY17 work will focus will focus on selected sensor and electronic warfare systems and continue work on communications systems. - Electronic Warfare: Maintain situational awareness of and contribute to evolving DoD and Service electronic warfare strategy, and in conjunction with Electromagnetic Spectrum Operations efforts, assist in coordinating development of new and integrated enterprise capabilities. - Tactical Data Link Modernization: Provide OSD oversight and cross-Service coordination of Tactical Data Link (TDL) modernization issues funded during FY16-FY17 Program Reviews. Identify areas where additional risk reduction activities are 			

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
<p>necessary in order to meet CAPE and DMAG guidance/schedule. Track and assess testing of Link 16 capability improvements in Multi-function Information Distribution System (MIDS-J) terminals (4th Gen aircraft), Communications, Navigation & Identification (CNI) terminal in F-35, emerging 6th Gen aircraft concepts, and Weapons Data Link (WDL) radios. Assess transferability of these improvements to other omni-directional TDLs, such as TTNT. Begin establishing an improved enterprise governance model for Tactical Data Links. Continue to perform oversight and joint acquisition integration of Service implementation of congressionally directed (FY17 NDAA) focus on a modular open system approach (MOSA), to the maximum extent practicable for TDLs, in synchronization with CDL, and other appropriate capabilities. Identify MADL evolution technology development needs for further funding to enable transition to F-35 and other platforms, and begin establishment of a Government Controlled Technical Baseline for MADL. Assess modeling and simulation infrastructure and currency with adversary threat emitters to improve investment decisions on TDL improvements.</p> <ul style="list-style-type: none"> - Space Ops: Conduct SATOPS Modernization technical assessments; provide technical Oversight/AFSCN Modernization Implementation; conduct AFSCN Event Driven Net Centric Review/Technical Assessment. - PNT Programs Technical Assessments: Continue OIPT leadership role. Develop and implement Annual GPS Enterprise Review to verify readiness of GPS III, MGUE, and OCX programs to progress to next phase of the acquisition process. Ensure synchronization of the three programs to meet the direction of the DAE. Conduct deep dive technical analyses to understand all phases of the GPS enterprise programs and predecessor programs that are part of the GPS Enterprise. Review PNT programs for data strategies, systems engineering, risks and mitigations in support of milestone decisions. Initiate and conduct studies to expedite fielding and support of M Code capability for forces in the field. Conduct Nunn-McCurdy Reviews of program that have critically breached APB cost parameters and prepare for DAE Certification. Report results to congress after DAE Certification and ensure regular reporting is conducted IEW public law. Conduct reviews of innovative acquisition efforts intended to reduce overall satellite cost through payload and spacecraft competition. Conduct Quarterly OCX Reviews at USD/SECAF/CEO level to ensure OCX maintains progress towards fielding user required capabilities. Develop and implement contingency plans to ensure constellation command and control management and enable early M-Code availability. - PNT Portfolio Management: Continue implementation of GPSEM/PNT Assurance Investment Strategy and Roadmap, ensuring AoA recommendations are addressed. Continue to support major program milestones and internal OSD reviews such as Strategic Portfolio Reviews, DMAGs, etc. - National Leadership Command Capability (NLCC): Continue in lead role as primary action office for A&S in her role as Nuclear Command, Control, and Communications (NC3) Enterprise Capability Portfolio Manager and co-chair of the Council on Oversight of the National Leadership Command, Control, and Communications System (CONLC3S). Work directly with United States Strategic Command Nuclear Enterprise Center and the CONCL3S Executive Secretariat (DOD CIO) to oversee all aspects of NC3 and National Leadership Command Capability (NLCC) governance and subordinate working groups that prepare/tee up decisions and execute assigned actions. Continue as primary action office for NC3 enterprise capability portfolio management. Continue as primary A&S action office to respond to congressionally-directed actions. Continue as primary A&S representative to NC3 and NLCC-related studies, analyses, and policy updates. Also lead review process for any NC3 and NLCC related documents. 			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>- NC3 Capability Portfolio Manager (CPM): Work collaboratively and support Commander US Strategic Command (CDRUSSTRATCOM) in his role as the NC3 Enterprise Lead. In this capacity, manage NC3 modernization and sustainment activities across approximately 220 programs, systems, and projects as a portfolio of capabilities rather than a series of episodic and unsynchronized programs. With increased acquisition and resource responsibilities the NC3 CPM will lead the NC3 Enterprise process, develop and advocate for NC3 within the Program Budget and Review process, and provide CDRUSSTRATCOM resource and acquisition information to inform operational risk assessment.</p> <p>- Joint C2 Portfolio Management: Collaborate with CIO as PSA for C2, and Joint Staff J6 as the User Capabilities POC to invigorate the JC2 Governance Framework. Increase relevancy and enhance the relationship with the PM-CESG Program Managers and other members and the OSD and Joint Staff.</p> <p>- C2 Data: Provide technical expertise for ensuring C2 data are visible, accessible, understandable, trustable and interoperable. Provide technical assessment and assistance for implementation of National Information Exchange Model (NIEM)-based information exchanges across the DoD. Update the C2 Authoritative Data Source roadmap and update C2 data architecture.</p> <p>- Joint C2 Architecture: Provided technical expertise for the update the Joint C2 Architecture to guide Joint C2 capability area development activities across the Services, Agencies and Combatant Commands.</p> <p>- Continue Analysis of Alternatives on the Coalition Information Sharing Environment. This AT&L-led independent 18-month study will analyze and recommend a preferred alternative to determine the most effective and efficient means for the Department of Defense to provide a coalition network and services in support of Mission Partner operations.</p> <p>- Software Provenance and Supply Chain Risk Management: Continue to provide technical analysis and support to Software Provenance and Supply Chain Risk Management policy development, including implementation plans for changes in statute, regulation and management direction. Provide technical assessments and course of action recommendations to address cybersecurity engineering and risk management considerations in the procurement process. Upon request, provide technical expertise and industry assessments to facilitate development of standard procedures to institutionalize SCRM in the procurement process. Focus areas may include development implementation plans, policy development and piloting initiatives, technical assessments of threat information sharing tools, evaluation of independent continuous monitoring capabilities, and recommendations for legislative change proposals to improve DoD's execution of SCRM</p> <p>- Advanced Software - Pilot Program: Continue to provide Technical/Engineering support to Agile Acquisition Pilots and Policy development, Support as Administrator and Curator for the online Agile Community of Practice, Provide SME contributions & Technical/Engineering support to individual Agile Acquisition Pilots as Pilot Advisor, Assist pilot programs with development of their required program documentation, Provide agile coaching and training. Provide Technical/Engineering support to Software Provenance and Supply Chain Risk Management Planning: Develop Campaign Plan and implementation plan for "Deliver Uncompromised" initiatives, Draft "101" type informational briefing materials, courseware inputs, ID and assess info sharing tools, development of draft policy/procedures documents. Deliver a 180 day status report & draft final Congressional Pilot reports, Provide Technical/ Engineering Support to Agile Acquisition Pilots.</p>			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019	FY 2020
<p>- Advanced Software - Defense Science Board Recommendations Implementation: Continue to develop practical approaches to encourage adoption of game-changing software development and sustainment approaches that will deliver capabilities that catalyze greater mission impact to the warfighter and Enterprise more rapidly while better controlling cost and improving resilience in the current and emerging cyber threat environment. Develop a final Implementation Strategic Roadmap that identifies short, medium, and long-term goals for each of the DSB recommendations. It will identify likely risk areas, develop risk reduction approaches, and propose appropriate metrics for new programs that will better reflect the health of software programs undergoing modernization or in development.</p> <p>- Innovative Acquisition Approaches: Continue to develop or enhance innovative acquisition approaches across hardware, software, IT infrastructure and services acquisition policy and processes to better align with best practices and modern technology approaches. Facilitate widespread adoption of rapid acquisition paths through translating lessons learned/best practices into policy, guidance, and training products and tools, working in partnership with the Acquisition Accelerator sponsored by Strategy Data & Design.</p> <p>- Set-up expanded Air Defense Offensive Counter Air (ADOCA) F-35 support to advise OUSD (A&S) and OASD (A) senior leaders on strategies to produce, develop, and sustain the F-35 Lightning II program and worldwide fleet of aircraft. Provides expert acquisition/program support to enable PPBE planning for the F-35 POM and overall program requirements development. Collaborates with OSD, JCS, F-35 JPO, HAF, & OPNAV as needed. Provides additional portfolio support to ADOCA as required.</p> <p>- Establish the following Mission Engineering capabilities: Develop and manage effects kill chains and enabling architectures. Work with engineers and architects to translate operational needs to capabilities and system networks. Implement kill chains in modeling and simulation environments and execute effects/kill chain performance assessments. Compiles and lends meaning to large amounts of program capability data. Uses expertise in sorting through existing analysis, reviews, studies, industry data, requirements documents, operational scenarios, etc. to uncover data relevant to a thorough evaluation of the effectiveness of a defined mission area.</p> <p>- Launch Maneuver Warfare support which will exploit firepower and attrition on key elements of opposing forces. The Maneuver Element Analyst advocates strategic movement that can bring about the defeat of an opposing force more efficiently than by simply contacting and destroying enemy forces until they can no longer fight. Instead, in maneuver warfare, the destruction of enemy targets is combined with isolation of enemy forces and the exploitation by movement of enemy weaknesses.</p> <p>FY 2020 Plans: IIPM: - Common Data Link (CDL) Principal Staff Assistant: Continue to coordinate with CDL Executive Agent (EA) to develop and maintain a technology roadmap and terminal database to improve interoperability, configuration management, and focused</p>				

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
<p>technology investments. Continue implementation and oversight of an enterprise transition strategy to modernize DoD ISR waveforms to converge on a DoD standard for tactical ISR communications. Update CDL technology development roadmap to reflect current trends in technology that can add enhanced capabilities to CDL systems. Continue planning and conduct of CDL SRP and IPT meetings to develop and refine the CDL investment portfolio and to identify strategic ISR communications issues the DoD will face in the future. Conduct analysis of Airborne ISR communications transport infrastructure in coordination with Joint Staff, Services and Combatant Commands in order to identify a way ahead for establishing an effective/efficient global enterprise capability. Conduct annual CDL enterprise modernization analysis and review Service PPBE submissions to assess enterprise migration to Bandwidth Efficient CDL by 2023. Continue to promote open system development solutions that expand the vendor base and allow increased competition and innovation. Expand the CDL Reference Implementation Laboratory concept of a government owned technical baseline while assessing a Common Development Environment that encourages rapid develop, testing, and fielding of new capabilities.</p> <p>Mid-Term Polar SATCOM (MPS) / EPS: Provide programmatic analysis, technical reviews, and assessments of the MPS and EPS programs to reduce development, integration, and procurement risks. Assess risk as the TT&C system is integrated and tested prior to operations. Work to support and assess efforts for the follow-on MPS system, whether as a hosted payload or a free flyer.</p> <p>- MUOS capable terminals: Support FOT&E execution. Provide analysis, technical assessments and fielding reviews for implementing the MUOS capability. Work to support the certification of ground, maritime and airborne terminals, and testing required to enable operational authorizations.</p> <p>- Joint Tactical Networking Center (JTNC): Provide technical and programmatic analysis to support the Defense Acquisition Executive's role as the co-chair of the JTNC Board of Directors (BoD). Provide Secretariat functions for the JTNC BoD.</p> <p>- All former JTRS(HMS, MNVR, AMF, JTN)Programs – Upon request, provide technical expertise and recommendations to facilitate program compliance with IT related acquisition policy, in accordance with DoD Series 5000 and applicable Milestone Decision Authority direction. Provide programmatic recommendations regarding cost/schedule/performance tradeoffs and application of evolving acquisition policies, based on lessons observed in oversight of acquisition programs across the Department.</p> <p>- Ground Tactical Networks Advanced Capabilities: Mature narrowband dismounted communications capability with radio hardware prototype, robust modeling and simulation, and reusable waveform software code. Form industry engagement to promote transition into non-developmental item radios.</p> <p>- Integrated Electromagnetic Spectrum Operations (EMSO): Track implementation of iEMSO strategy in radio and EW device development plans. Assess and down-select technical interoperability and architectural approaches. Ensure adequate funding and testing to assess maturity of solutions. Develop science and technology roadmap to synchronize transition of key technologies to programs of record for spectrum-dependent systems. FY17 work will focus will focus on selected sensor and electronic warfare systems and continue work on communications systems.</p>			

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Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 771 / <i>Link-16 Tactical Data Link (TDL) Transformation</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>- Electronic Warfare: Maintain situational awareness of and contribute to evolving DoD and Service electronic warfare strategy, and in conjunction with Electromagnetic Spectrum Operations efforts, assist in coordinating development of new and integrated enterprise capabilities.</p> <p>- Tactical Data Link Modernization: Provide OSD oversight and cross-Service coordination of Tactical Data Link (TDL) modernization issues funded during FY16-FY19 Program Reviews. Identify areas where additional risk reduction activities are necessary in order to meet CAPE and DMAG guidance/schedule. Track and assess testing of Link 16 capability improvements in Multi-function Information Distribution System (MIDS-J) terminals (4th Gen aircraft), Communications, Navigation & Identification (CNI) terminal in F-35, emerging 6th Gen aircraft concepts, and Weapons Data Link (WDL) radios. Assess transferability of these improvements to other omni-directional TDLs, such as TTNT. Begin establishing an improved enterprise governance model for Tactical Data Links. Continue to perform oversight and joint acquisition integration of Service implementation of congressionally directed (FY17 NDAA) focus on a modular open system approach (MOSA), to the maximum extent practicable for TDLs, in synchronization with CDL, and other appropriate capabilities. Identify MADL evolution technology development needs for further funding to enable transition to F-35 and other platforms, and begin establishment of a Government Controlled Technical Baseline for MADL. Assess modeling and simulation infrastructure and currency with adversary threat emitters to improve investment decisions on TDL improvements.</p> <p>- National Leadership Command Capability (NLCC): Continue in lead role as primary action office for A&S in her role as Nuclear Command, Control, and Communications (NC3) Enterprise Capability Portfolio Manager and co-chair of the Council on Oversight of the National Leadership Command, Control, and Communications System (CONLCC3S). Work directly with United States Strategic Command Nuclear Enterprise Center and the CONLCC3S Executive Secretariat (DOD CIO) to oversee all aspects of NC3 and National Leadership Command Capability (NLCC) governance and subordinate working groups that prepare/tee up decisions and execute assigned actions. Continue as primary action office for NC3 enterprise capability portfolio management. Continue as primary A&S action office to respond to congressionally-directed actions. Continue as primary A&S representative to NC3 and NLCC-related studies, analyses, and policy updates. Also lead review process for any NC3 and NLCC related documents.</p> <p>- Joint C2 Portfolio Management: Collaborate with CIO as PSA for C2, and Joint Staff J6 as the User Capabilities POC to invigorate the JC2 Governance Framework. Increase relevancy and enhance the relationship with the PM-CESG Program Managers and other members and the OSD and Joint Staff.</p> <p>- C2 Data: Provide technical expertise for ensuring C2 data are visible, accessible, understandable, trustable and interoperable. Provide technical assessment and assistance for implementation of National Information Exchange Model (NIEM)-based information exchanges across the DoD. Update the C2 Authoritative Data Source roadmap and update C2 data architecture.</p> <p>- Joint C2 Architecture: Provided technical expertise for the update the Joint C2 Architecture to guide Joint C2 capability area development activities across the Services, Agencies and Combatant Commands.</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 771 / <i>Link-16 Tactical Data Link (TDL) Transformation</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>- Continue Analysis of Alternatives on the Coalition Information Sharing Environment. This AT&L-led independent 18-month study will analyze and recommend a preferred alternative to determine the most effective and efficient means for the Department of Defense to provide a coalition network and services in support of Mission Partner operations.</p> <p>- Propose to Congress changes to existing statutory authorities that will provide USD(A&S) with the authorities necessary to effectively manage the NC3 Enterprise.</p> <p>- Update policies on Nuclear Command, Control, and Communications Systems.</p> <p>- Conduct independent technical risk assessments of five MDAP NC3 programs per CDRUSSTRATCOM established priorities.</p> <p>- Conduct independent technical risk assessment of ten non-MDAP NC3 programs per CDRUSSTRATCOM established priorities.</p> <p>- Review and assess DoD Component plans, programs, and budgets for budget justification and execution and provide advice and assistance to senior DoD Officials at semi-annual NC3 Enterprise Reviews</p> <p>AE:</p> <p>- Software Provenance and Supply Chain Risk Management: Continue to provide technical analysis and support to Software Provenance and Supply Chain Risk Management policy development, including implementation plans for changes in statute, regulation and management direction. Provide technical assessments and course of action recommendations to address cybersecurity engineering and risk management considerations in the procurement process. Upon request, provide technical expertise and industry assessments to facilitate development of standard procedures to institutionalize SCRM in the procurement process. Focus areas may include development implementation plans, policy development and piloting initiatives, technical assessments of threat information sharing tools, evaluation of independent continuous monitoring capabilities, and recommendations for legislative change proposals to improve DoD's execution of SCRM.</p> <p>- Advanced Software Pilot Program: Continue to provide Technical/Engineering support to Agile Acquisition Pilots and Policy development, Support as Administrator and Curator for the online Agile Community of Practice, Provide SME contributions & Technical/Engineering support to individual Agile Acquisition Pilots as Pilot Advisor, Assist pilot programs with development of their required program documentation, Provide agile coaching and training. Provide Technical/Engineering support to Software Provenance and Supply Chain Risk Management Planning: Develop Campaign Plan and implementation plan for "Deliver Uncompromised" initiatives, Draft "101" type informational briefing materials, courseware inputs, ID and assess info sharing tools, development of draft policy/procedures documents. Deliver a 180 day status report & draft final Congressional Pilot reports, Provide Technical/ Engineering Support to Agile Acquisition Pilots.</p> <p>- Defense Science Board Software Recommendations Implementation: Develop practical approaches to encourage adoption of game-changing software development and sustainment approaches that will deliver capabilities that catalyze greater mission impact to the warfighter and Enterprise more rapidly while better controlling cost and improving resilience in the current and emerging cyber threat environment. Develop a draft Implementation Strategic Roadmap that identifies short, medium, and long-term goals for each of the DSB recommendations. It will identify likely risk areas, develop risk reduction approaches, and propose appropriate metrics for new programs that will better reflect the health of software programs undergoing modernization</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>or in development. Approaches to develop software sustainment plans that embrace these recommendations will be explored and productive implementation guidance will be produced, critiqued, and shared with the applicable software development and sustainment work force professionals.</p> <ul style="list-style-type: none"> - Innovative Acquisition Approaches: Develop or enhance innovative acquisition approaches across hardware, software, IT infrastructure and services acquisition policy and processes to better align with best practices and modern technology approaches. Facilitate widespread adoption of rapid acquisition paths through translating lessons learned/best practices into policy, guidance, and training products and tools, working in partnership with the Acquisition Accelerator sponsored by Strategy Data & Design. <p>P&WP:</p> <ul style="list-style-type: none"> - Continues Air Defense Offensive Counter Air (ADOCA) F-35 support to advise OUSD (A&S) and OASD (A) senior leaders on strategies to produce, develop, and sustain the F-35 Lightning II program and worldwide fleet of aircraft. Provides expert acquisition/program support to enable PPBE planning for the F-35 POM and overall program requirements development. - Enables the following Mission Engineering capabilities: Develop and manage effects kill chains and enabling architectures. Work with engineers and architects to translate operational needs to capabilities and system networks. Implement kill chains in modeling and simulation environments and execute effects/kill chain performance assessments. Compile and lend meaning to large amounts of program capability data. - Carries on Maneuver Element analytical effort to exploit firepower and attrition on key elements of opposing forces. <p>FY 2019 to FY 2020 Increase/Decrease Statement: Decrease in funding impacts the DASDs ability to conduct studies and analysis addressing complex command and communications issues.</p>			
Accomplishments/Planned Programs Subtotals	19.268	20.207	12.563

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

N/A

Remarks

D. Acquisition Strategy

In executing JTDL tasking, existing fixed-price and cost-plus contracts will be utilized.

- Program reviews in support of the JCIDS, acquisition and PPBE processes.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
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E. Performance Metrics

Enterprise-Wide Alignment: Accelerate DoD information age transformation to increase the effectiveness and efficiency of the warfighting, intelligence and business missions.

Measures:

- Timely development and issuance of policy and guidance
- Instantiation of enterprise-wide system engineering for the Joint Information Environment (JIE)

Portfolio Management: Provide for the timely and effective delivery of key Net-Centric capabilities through portfolio management of associated technology development and Major Defense Acquisition Programs (MDAPS) and Major Automated Information Systems (MAIS).

Measures:

- Key milestones completed for major net-centric acquisitions
- Number of major systems successfully completing net-centric critical performance reviews

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 771 / <i>Link-16 Tactical Data Link (TDL) Transformation</i>
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Management Services (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Link-16 Tactical Data Link (TDL) Transformation	C/TBD	OUSD(AT&L)/ OASD(A)/ DASD(C3CB) : Pentagon	92.650	19.268		20.207		12.563		-		12.563	-	-	-
Subtotal			92.650	19.268		20.207		12.563		-		12.563	-	-	N/A

Remarks
NA

	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	92.650	19.268	20.207	12.563	-	12.563	-	-	N/A

Remarks
Resources will be used to provide technical, systems engineering and acquisition management oversight of programs, projects and activities to maximize the Department's return on investment in information technology resources and to affect a comprehensive approach for assessing and procuring critical information systems from initial design, through development to capability delivery in support of improved weapons systems performance and military operations.

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 771 / <i>Link-16 Tactical Data Link (TDL) Transformation</i>
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FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Link-16 Comm Tactical Data Link (TDL) Transformation	
Contract Awards	[REDACTED]

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 771 / <i>Link-16 Tactical Data Link (TDL) Transformation</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Link-16 Comm Tactical Data Link (TDL) Transformation</i>				
Contract Awards	2	2019	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense										Date: February 2019		
Appropriation/Budget Activity 0400 / 5					R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>				Project (Number/Name) 105 / <i>Cyber Capability & Platform Resilience</i>			
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
105: <i>Cyber Capability & Platform Resilience</i>	8.420	5.000	14.218	12.539	-	12.539	4.742	3.030	2.990	3.053	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Provides resources for developmental acquisition support and portfolio management (to include the Cyber Investment and Management Board (CIMB)) of Cyber capabilities as the Department conceives, develops, and rapidly fields cyber capabilities for Cyberspace Operations and the instantiation of cyber resilient platforms and weapons systems for priority kinetic and non-kinetic missions. The CIMB was established in 2012 in response to the FY2011 NDAA Section 933, where DoD was directed to provide a strategy for the rapid acquisition of cyber capabilities, for cyber warfare for USCC and the Cyber Service components of the military departments. USD(A&S) is responsible for compliance with the FY2011 NDAA and Chairs the CIMB. Funds provide technical, systems engineering, trend analysis, and portfolio management of programs, projects and activities developing cyber capabilities to maximize the Department's return on investment of cyberspace resources and effect a comprehensive approach for assessing, procuring, and sustaining critical cyber capabilities and cyber resilient systems and platforms from initial design, through development to capability delivery in support of weapons systems performance and military operations. Additionally, these funds will provide systems analyses, portfolio management, executive support of CIMB, enterprise wide systems engineering and operational impact analyses related to Cyber capabilities and ensuring cyber resilience within systems and platforms. Resources will also be used to provide expertise required for exercising technical direction over design, performance, cost parameters, determining and mitigating cyber risks of key systems and their dependencies. The goal of this funding is to assure capability advantage, reduce time to the field, evaluate projects and concepts, minimize cyber related performance and operational risk of developing and fielding complex systems, ensure program dependencies are documented and included in acquisition decisions and address cyber security requirements, gaps and required technical solutions.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
Title: Cyber Capability and Platform Resilience	5.000	14.218	12.539
Description: Provides resources for developmental acquisition support and portfolio management (to include the Cyber Investment and Management Board (CIMB)) of Cyber capabilities as the Department conceives, develops, and rapidly fields cyber capabilities for Cyberspace Operations and the instantiation of cyber resilient platforms and weapons systems for priority kinetic and non-kinetic missions. The CIMB was established in 2012 in response to the FY2011 NDAA Section 933, where DoD was directed to provide a strategy for the rapid acquisition of cyber capabilities, for cyber warfare for USCC and the Cyber Service components of the military departments. USD(A&S) is responsible for compliance with the FY2011 NDAA and Chairs the CIMB. Funds provide technical, systems engineering, trend analysis, and portfolio management of programs, projects and activities developing cyber capabilities to maximize the Department's return on investment of cyberspace resources and effect a comprehensive approach for assessing, procuring, and sustaining critical cyber capabilities and cyber resilient systems and platforms from initial design, through development to capability delivery in support of weapons systems performance and military operations. Additionally, these funds will provide systems analyses, portfolio management, executive support of CIMB, enterprise			

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 105 / <i>Cyber Capability & Platform Resilience</i>

B. Accomplishments/Planned Programs (\$ in Millions)

wide systems engineering and operational impact analyses related to Cyber capabilities and ensuring cyber resilience within systems and platforms. Resources will also be used to provide expertise required for exercising technical direction over design, performance, cost parameters, determining and mitigating cyber risks of key systems and their dependencies. The goal of this funding is to assure capability advantage, reduce time to the field, evaluate projects and concepts, minimize cyber related performance and operational risk of developing and fielding complex systems, ensure program dependencies are documented and included in acquisition decisions and address cyber security requirements, gaps and required technical solutions.

FY 2019 Plans:

- Cyber Investment Management: Synchronize and coordinate cyberspace acquisition activities, conduct quantitative assessments, and ensure cyberspace investments align with Department priorities, required capabilities and evolving cyber threats. Provide support of the Cyber Investment Management Board and develop implementation guidance and associated direction that provides strategic guidance and feedback to senior leaders. Continue to plan and conduct CIMB/CCT meetings to refine the cyber investment portfolio, review execution of cyber requirements and acquisition processes, and to identify strategic cyber issues the DoD will face in the future.
- Refine the Cyber investment portfolio results, ensuring return on investment and risk ultimately leading to an optimization phase focusing on process improvement is included.
- Conduct investment analysis of the DoD-wide Cyber Special Access Program (SAP) portfolio to include return on investment and risk analysis.
- Continue oversight of implementation of the Cyber Situational Awareness EoA (phase II) recommendations.
- As Principal Staff Assistant OPR for the Unified Platform (UP), oversee the Air Force's, as DoD Executive Agent, capability development via portfolio management and governance. Assess UP's interfaces, dependencies, and linkages with other components of the Joint Cyber Warfighting Architecture to enable effective and efficient offensive and defensive effects.
- Continue oversight of Joint Cyber Command and Control (C2) capability development.
- Ensure Platform Resilience/Mission Assurance (PR/MA); Oversee implementation of the recommendations on Cyber vulnerabilities of Department of Defense weapon systems and tactical communications systems.
- Ensure execution of the evaluation of cyber vulnerabilities of DoD critical infrastructure plan. Conduct data gathering and technical assessments to support the development of meaningful acquisition requirements for the PCTE and other programs of interest as they relate to capabilities of diverse DoD cyber range capabilities.
- Manage the portfolio of DoD cyber training systems (includes DoD Persistent Cyber Training Environment (PCTE)); govern the PCTE as a member of the PCTE governance boards.
- Continue to synchronize and govern the DoD Cyber Ranges that support Cyber Training and Testing & Evaluations as a member of the Cyber Ranges governance boards. Implement DoD Cyber Strategy by incorporating the cyber ranges reference architecture into the Joint Cyber Warfighting Architecture.

FY 2018	FY 2019	FY 2020

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 105 / <i>Cyber Capability & Platform Resilience</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>- With USCYBERCOM, manage the portfolio of Joint Cyber Warfighting Architecture components to enable the cyber mission force to efficiently and effectively conduct offensive and defensive cyber missions. Supports offensive and defensive architecture development and portfolio management in collaboration with USCYBERCOM.</p> <p>- Joint Cyber C2: Continue oversight of Joint Cyber Command and Control (C2) capability development. Upon request, support implementation of the preferred alternative identified during the Joint Cyber C2 AoA. Continue oversight of implementation of the Cyber Situational Awareness EoA (phase II) recommendations. Track the status and provide technical recommendations associated with piloting efforts associated with the recommendations.</p> <p>FY 2020 Plans:</p> <p>- With USCYBERCOM, manage the portfolio of Joint Cyber Warfighting Architecture components to enable the cyber mission force to efficiently and effectively conduct offensive and defensive cyber missions. Supports offensive and defensive architecture development and portfolio management in collaboration with USCYBERCOM.</p> <p>- Manage the portfolio of DoD cyber training systems (includes DoD Persistent Cyber Training Environment (PCTE)); govern the PCTE as a member of the PCTE governance boards.</p> <p>- As Principal Staff Assistant OPR for the Unified Platform (UP), oversee the Air Force's, as DoD Executive Agent, capability development via portfolio management and governance. Assess UP's interfaces, dependencies, and linkages with other components of the Joint Cyber Warfighting Architecture to enable effective and efficient offensive and defensive effects.</p> <p>- Ensure Platform Resilience/Mission Assurance (PR/MA); Oversee implementation of the recommendations on Cyber vulnerabilities of Department of Defense weapon systems and tactical communications systems.</p> <p>- Ensure execution of the evaluation of cyber vulnerabilities of DoD critical infrastructure plan. Conduct data gathering and technical assessments to support the development of meaningful acquisition requirements for the PCTE and other programs of interest as they relate to capabilities of diverse DoD cyber range capabilities.</p> <p>- Defense Industrial Base (DIB) Secure Cloud Managed Services Pilot:</p> <p>-- Conduct pilot to demonstrate and provide scalable and cost-effective cloud and managed cybersecurity services for Defense Industrial Base (DIB) companies to protect DoD controlled unclassified information. Focus cloud and cybersecurity services towards a subset of small-to-medium sized DIB companies that support prioritized, critical DoD missions and programs. The vast majority of the DIB sector consists of small-to-medium sized companies that lack sufficient cybersecurity capabilities to protect controlled unclassified information from a determined adversary.</p> <p>FY 2019 to FY 2020 Increase/Decrease Statement: Increase in funds for Cyber efforts.</p>			
Accomplishments/Planned Programs Subtotals	5.000	14.218	12.539

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
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C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Existing firm fixed priced and cost plus contracts will be utilized.

E. Performance Metrics

Enterprise-Wide Cyber Investments: instantiation of cyber capabilities for resilient systems include risk assessments, vulnerability assessments, mitigation plans, prototype architectures, investment strategies, trends analyses, Evaluation/Analysis of Alternatives, integrated mission analyses, technical and policy guidance directives.

Measures:

- Timely development and issuance of policy and guidance
- Timely delivery and development of key investment strategies, trend analysis and outcomes of the Evaluation/Analysis of Alternatives.

Portfolio Management: Provide for the timely and effective delivery of portfolio management support of associated with Cyber Security and Major Defense Acquisition Programs (MDAPS) and Major Automated Information Systems (MAIS).

Measures:

- Key milestones completed for major cyber related acquisitions

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 105 / <i>Cyber Capability & Platform Resilience</i>
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Support (\$ in Millions)				FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Contract awards	C/CPFF	OUSD AT&L DASD C3CB : Pentagon/ Mark Center	8.420	5.000	Feb 2019	14.218	Feb 2020	12.539		-		12.539	Continuing	Continuing	-
Subtotal			8.420	5.000		14.218		12.539		-		12.539	Continuing	Continuing	N/A

Remarks
NA

	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	8.420	5.000	14.218	12.539	-	12.539	Continuing	Continuing	N/A

Remarks
NA

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Office of the Secretary Of Defense		Date: February 2019
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	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

Cyber Capability and Platform Resilience	
Contract Awards	[REDACTED]

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 105 / <i>Cyber Capability & Platform Resilience</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Cyber Capability and Platform Resilience</i>				
Contract Awards	2	2019	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense **Date:** February 2019

Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / Joint Tactical Information Distribution System (JTIDS)	Project (Number/Name) 028 / DIB Secure Cloud Managed Services Pilot
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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
028: DIB Secure Cloud Managed Services Pilot	0.000	0.000	0.000	15.000	-	15.000	10.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Conduct pilot to demonstrate and provide scalable and cost-effective cloud and managed cybersecurity services for Defense Industrial Base (DIB) companies to protect DoD controlled unclassified information. Focus cloud and cybersecurity services towards a subset of small-to-medium sized DIB companies that support prioritized, critical DoD missions and programs. The vast majority of the DIB sector consists of small-to-medium sized companies that lack sufficient cybersecurity capabilities to protect controlled unclassified information from a determined adversary.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2018	FY 2019	FY 2020
Title: DIB Secure Cloud Managed Services Pilot	0.000	-	15.000
Description: Conduct pilot to demonstrate and provide scalable and cost-effective cloud and managed cybersecurity services for Defense Industrial Base (DIB) companies to protect DoD controlled unclassified information. Focus cloud and cybersecurity services towards a subset of small-to-medium sized DIB companies that support prioritized, critical DoD missions and programs. The vast majority of the DIB sector consists of small-to-medium sized companies that lack sufficient cybersecurity capabilities to protect controlled unclassified information from a determined adversary.			
FY 2020 Plans: Conduct pilot to demonstrate and provide scalable and cost-effective cloud and managed cybersecurity services for Defense Industrial Base (DIB) companies to protect DoD controlled unclassified information. Focus cloud and cybersecurity services towards a subset of small-to-medium sized DIB companies that support prioritized, critical DoD missions and programs. The vast majority of the DIB sector consists of small-to-medium sized companies that lack sufficient cybersecurity capabilities to protect controlled unclassified information from a determined adversary.			
FY 2019 to FY 2020 Increase/Decrease Statement: \$15M Congressional Add for DIB Cloud Pilot in FY20			
Accomplishments/Planned Programs Subtotals	0.000	-	15.000

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

N/A

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 028 / <i>DIB Secure Cloud Managed Services Pilot</i>

D. Acquisition Strategy

N/A

E. Performance Metrics

NA

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Exhibit R-4, RDT&E Schedule Profile: PB 2020 Office of the Secretary Of Defense		Date: February 2019
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	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<i>DIB Secure Managed Services Pilot</i>																												
DIB Secure Managed Services Pilot																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2020 Office of the Secretary Of Defense		Date: February 2019
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0604771D8Z / <i>Joint Tactical Information Distribution System (JTIDS)</i>	Project (Number/Name) 028 / <i>DIB Secure Cloud Managed Services Pilot</i>

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>DIB Secure Managed Services Pilot</i>				
DIB Secure Managed Services Pilot	4	2019	3	2021