

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Technical Information Center	Date: March 2019
---	-------------------------

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 6: RDT&E Management Support</i>					PE 0605801KA / <i>Defense Technical Information Center</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
Total Program Element	207.780	55.114	56.853	57.716	-	57.716	59.778	61.709	62.808	64.109	Continuing	Continuing
001: <i>Defense Technical Information Center</i>	183.483	50.040	51.837	52.700	-	52.700	54.762	56.693	57.792	59.093	Continuing	Continuing
002: <i>Information Analysis Centers</i>	24.297	5.074	5.016	5.016	-	5.016	5.016	5.016	5.016	5.016	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Technical Information Center's (DTIC) unique mission is to aggregate and fuse science and technology data to provide rapid, accurate, and reliable knowledge to researchers and developers of the next generation of technologies needed to assure our national security. DTIC, a DoD Field Activity, currently under the authority, direction and control of the Under Secretary of Defense for Research and Engineering (USD(R&E)), is the DoD's singular executive agent and designated source for DoD-funded scientific, technical, engineering, and industry-related information. During FY 2019, DTIC is slated to realign under the DoD Chief Management Officer (CMO). Under the CMO, DTIC will focus on the enterprise data management mission of the Department. DTIC also operates DoD Information Analysis Centers (IACs) focused on Defense Systems, Cyber Security and Information Systems, and Homeland Defense and Security. Both DTIC and IAC operations are focused on actively supporting USD(R&E) efforts in generating decisive and sustained U.S. military advantages through the pursuit of three distinct lines of effort, as outlined in the 2018 National Defense Strategy (NDS):

- 1) Rebuild military readiness as we build a more lethal Joint Force: DTIC's support, search, collection, collaboration sites, and IAC services offer an underpinning element available to all Agencies, Program Offices, and Research Labs that contribute to the rebuilding of the Joint Force.
- 2) Strengthen alliances as we attract new partners: The International Agreements Database (IAD-B); support to the OSD Comparative Technology Office (CTO); DTIC's COCOM reading room providing industry insight into COCOM S&T needs; and participation in NATO's Science & Technology Organization (STO) Collaboration Support Office (CSO); these efforts provide a complement of tools and cooperative activities that foster the relationships that underpin our alliances.
- 3) Reform the Department's business practices for greater performance and affordability: DTIC's support, search, collection, programming, collaborative sites, and IAC services are a ready source for best practices and collaborative partnering and team building as the Department works to improve processes and access.

In concert with the 2018 NDS, DTIC's investment in new tools and capabilities will address customer needs and underwrite the innovation necessary to support DoD's enduring mission to provide combat-ready military forces to deter war and protect the security of our nation.

The Department invests over \$90 Billion annually in Research, Development, Test and Evaluation (RDT&E) needed to protect and defend our nation. DTIC preserves the fruits of these costly labors for reuse across the enterprise. As an efficient and cost-effective steward of technical information, DTIC collects data and provides answers to researchers seeking state-of-the-art data relevant to their projects. Through this interchange of information, DTIC accelerates innovation and prevents duplication of experiments, tests, and prototyping activities because researchers can build on what has been done or choose other paths if prior research resulted in a dead end. Using DTIC-created forums, researchers, Warfighters, and industry partners can also rapidly collaborate and connect across the DoD research and

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Technical Information Center		Date: March 2019
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide / BA 6: RDT&E Management Support	R-1 Program Element (Number/Name) PE 0605801KA / Defense Technical Information Center	
engineering (R&E) enterprise. Finally, DTIC provides a department-level map of R&D activity. This map gives decision-makers insight into current and past research, highlighting where progress is being made and by whom. Through the preservation and sharing of the results of billions of dollars of past DoD investments, DTIC increases the return on past investments and accelerates current efforts, saving the Department precious time and dollars. Through its collaboration tools and outreach to the R&E community, DTIC connects researchers across the lab enterprise, to include researchers and engineers, Warfighters and DoD's industry partners. DTIC's strategic themes center on customer focus, innovation, operational excellence, and strategic partnering. In support of these themes, DTIC's organizational efforts are focused on the following priority areas: 1) Search: Develop new algorithms that enable our users to quickly discover useful information and to ensure we present the most relevant information. Semantic (machine learning) mapping of information for comprehensive and precise data retrieval--built on DTIC's custom thesaurus (for use by DoD and Allied partners). Expand and enhance our data collections to improve the quality and completeness of the data. 2) Collaboration: Provide collaboration platforms for the DoD science and technology community to work together on investments that efficiently deliver solutions to the Warfighter. 3) Access Identity: Strengthen methods of user authentication through the use of public key infrastructure (PKI) tokens, biometrics and other methods to grant access to recognized, trusted and authorized users. Protect intellectual property (IP) and industry proprietary data assets entrusted to DTIC's stewardship (protect information access). 4) Data Fusion/Analysis: Gather information from multiple data sources and provide knowledge products that fuse the disparate data sets into a single view of the life cycle of research. Present an overarching picture of research investment that enables decision-makers to link multiple efforts with integrated capabilities (employ resources to highest priority efforts and coordinate efforts across Services). 5) Cyber Security: Continue to leverage state-of-the art technologies, processes and practices designed to protect DTIC networks, computers, programs and data from attack, damage or unauthorized access. 6) Data Center Optimization/Cloud: Migrate services to cloud providers to improve availability, survivability, and mission flexibility; to reduce time to deliver new capabilities; to save costs; and to enhance cyber security. 7) Mobile and Emerging Technology: Ensure DTIC products, tools and interfaces are compatible with, and actively support customer/user (DOD, industry partners, academic researchers) devices, operating systems, and browsers. 8) Controlled Unclassified Information (CUI): An ongoing effort to standardize the way the Executive Branch handles unclassified information under a new document-marking framework. 9) Public Access /Open Science (for articles and digital data): Acquire and disseminate DoD-funded, openly published journal articles, free to the taxpayer, increasing access and encouraging innovation. Develop a catalog of digital data sets supporting the conclusions of journal articles. In response to congressional direction contained within the FY 2019 National Defense Authorization Act (NDAA), DTIC is piloting the following specific efforts: - Innovators Data Base: develop new tools in coordination with the Services and DoD Agencies. - Global Research Watch Program: The goal of the program includes achieving technological decision advantage and attain aided-technology watch and horizon scanning. This effort will forecast the evolution of known technologies, including the maturation of emerging technologies and new applications of existing technologies, and identify new technologies with disruptive potential.		

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Technical Information Center		Date: March 2019
Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 6: RDT&E Management Support</i>		R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>
- Datasets and Data Repositories: to develop and maintain datasets and other data repositories on research and engineering activities being conducted within the Department. Additionally, DTIC is expanding support and engagement with the newly established OUSD(R&E) organization in order to drive innovation faster: - Support the 2018 NDS: enable the development of lethality, partner engagement, and modernization. - Increase support to RDT&E Budget Activity 6.4, Advanced Component Development & Prototypes (ACD&P) activities. - The hosting of R&E websites and tools. - Establish an information sharing/repository for the Strategic Capabilities Office (SCO), the Defense Innovation Unit (DIU), and the Missile Defense Agency (MDA). - Increased knowledge resources focused on R&E Priority Areas. DTIC's restructured Information Analysis Centers (IACs) drive innovation and technological development by anticipating and responding to the information needs of the defense and broader community. The IAC Program Office provides core funding, management and oversight of three IACs, which are chartered by DoD to collect, analyze, and disseminate worldwide scientific and technical information in specialized fields. The IAC multi-award task order contracts ensure that new research, analysis, and development builds on prior investments and puts to work the best practices of government, industry, and academia. The IAC approach was identified as a "best practice" by the Director of Defense Pricing and Contracting and the then-Acting Assistant Secretary of Defense for Research and Engineering in a July 2018 memo wherein they promoted maximum use of the IAC contracts across DoD as "vehicles of first choice." The IACs are structured into three application areas: Cyber Security and Information Systems, Homeland Defense and Security, and Defense Systems. As part of the Department's acquisition improvement initiatives, the IAC multi-award contracts enhance competition, increase usage of small businesses, and reduce costs to the DoD. For the last several years, competition inherent in the IAC model has produced savings of 17-25 percent over projected costs, delivering vetted technical expertise to address many of the complex challenges DoD faces. An independent assessment by the Center for Strategic and International Studies reported that the IACs improve affordability, productivity, and standardization within defense acquisition programs. Providing the acquisition enterprise access to thousands of industry subject matter experts, DTIC's IACs performed over \$1.9 Billion of customer-funded research and analysis in FY 2018. The results of the work are a rich source of new material in DTIC's technical repositories and are available to users across the Department (and other federal agencies, e.g., Department of Energy, Department of Homeland Security). This Program Element (PE) supports DTIC mission operations. DTIC focuses on three core mission areas (Collection, Dissemination and IACs) and purchases space and shared services (e.g., human resources (HR); financial management; contracting; IT security; communications; and civilian payroll services) from expert and efficient DoD providers. DTIC recognizes the need to accomplish its mission while increasing the value of its services and products. DTIC has reduced its headquarter staffing, physical footprint, civilian personnel and support contractors. DTIC has restructured the IAC program, continues to consolidate its data center, and is an active participant in the Department's Fourth Estate IT Optimization effort.		

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Defense Technical Information Center	Date: March 2019
---	-------------------------

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 6:</i> <i>RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>
--	--

B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	54.145	56.853	58.411	-	58.411
Current President's Budget	55.114	56.853	57.716	-	57.716
Total Adjustments	0.969	0.000	-0.695	-	-0.695
• Congressional General Reductions	0.000	-			
• Congressional Directed Reductions	0.000	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Changes	0.969	0.000	-0.695	-	-0.695

Change Summary Explanation

Program Change: The FY 2020 Base program reduction (-\$0.695 Million), as compared to the Previous President's Budget FY 2020 Base, reflects a net change resulting from the following adjustments:

- 1) Department adjustments to FY 2020 civilian pay.
- 2) An unspecified program adjustment levied by the Department.

FY 2020 Service Requirements Review Board (SRRB) Reduction: The FY 2020 base program includes a \$0.740 Million reduction in accordance with the Department's recent service contract downsizing effort.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center										Date: March 2019		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605801KA / Defense Technical Information Center				Project (Number/Name) 001 / Defense Technical Information Center			
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
001: Defense Technical Information Center	183.483	50.040	51.837	52.700	-	52.700	54.762	56.693	57.792	59.093	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DTIC is responsible for developing, coordinating and enabling a strong scientific and technical information (STINFO) program for the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) and the DoD scientific and technical (S&T) enterprise. In this role, DTIC sets policy for scientific and technical information (STI) exchanges for the research and engineering (R&E) community. DTIC's aim is to maximize the availability and use of technical information and products resulting from Defense-funded technical activities while ensuring restrictions to safeguard national security, export control, and intellectual property rights.

Recognizing the common elements across budget justification documents, progress reports, completed work reports, studies, and journal articles, DTIC is mapping relationships to enable users to access the life cycle of research projects from planning to final results. DTIC employs information technology to verify and validate information submitted and improve user confidence in DoD research documentation.

DTIC is leading the Department's efforts to implement public access to published journal articles, and digital data from research funded by taxpayers. In this role, DTIC is actively working with partners across the Services, components, other federal agencies and publishers. These ongoing efforts directly complement and support the Department's objectives associated with Citizen Science. Consistent with the Administration's (Office of Management and Budget) emphasis for open standards and machine readable formats, DTIC initiated the transition from paper and Portable Document Format (PDF) based information to Web Service Extensible Markup Language (XML) standard data submission and machine readable delivery. DTIC partnered with the OSD Comptroller to collect investment account budget justification documentation in XML and embed this XML in PDF for justification books delivered to Congress. DTIC employed this same technology in collecting S&T progress reports from the Services and Agencies, and Independent Research and Development (IR&D) data from industry. DTIC is planning the migration of its completed technical reports collection to the same open standards, i.e., machine readable formats.

Through the use of commercial search technology, DTIC provides search capability that links its knowledge of the DoD domain and metadata to support both text searches and data mining. DTIC continually works to enable additional features within our search capabilities and from commercial partners to improve information discovery and relevance.

DoD conducts science and technology research via the following means: 60+ labs, Federally Funded Research and Development Centers (FFRDCs), DTIC's Information Analysis Centers (IACs), and other contracts and grants. Spanning over a dozen distinct priority area communities of interest, the results of this work are available through DTIC's web-based R&E Gateway. To protect this information, DTIC regulates access through a database of registered users. In addition, DTIC uses commercial software in compliance with DoD Identity Management Standards to provide instant authenticated access to users of the DoD Common Access Card (CAC)/Federal Government Personal Identity Verification (PIV) cards, industry PIV-I cards or External Certificate Authority (ECA). DTIC's unclassified assets, tools and community interaction capabilities foster innovation, competition and identification of solutions in an access-controlled environment.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>
Focus on User Communities and Distribution Points: DTIC supports user communities on the network where they work, i.e., NIPRNet, SIPRNet and public internet, and uniquely provides access controls within unclassified and classified material to protect intellectual property in our search, distribution, and collaboration tools. - DoD's RDT&E Enterprise: As a Field Activity to the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)), DTIC's priority is the RDT&E enterprise, hosting information assets and tools on the NIPRNet (the primary network for the community). During FY 2019, DTIC is slated to realign under the DoD Chief Management Officer (CMO). - Warfighter: Improving coordination between the acquisition enterprise and warfighter communities, DTIC hosts a subset of information assets and tools on the SIPRNet. DTIC is working to expand the availability of science and technology (S&T) information, to include Independent Research and Development (IR&D), on the SIPRNet. DTIC is continuing its efforts to establish parity of information and capabilities on applications hosted on both NIPRNet and SIPRNet platforms. - Industry, Academia, and Citizen Science via Public Internet: Engaging industry outside the NIPRNet firewall to support acquisition improvement initiatives and encourage the introduction of innovation, DTIC hosts unclassified public information and tools accessible to all users on the Internet. DTIC provides public access to DoD-funded journal articles and research data, and increases outreach to industry through DTIC's Defense Innovation Marketplace. The Public Access initiative adds importance to the public distribution point, to encourage technology transfer of basic and public research to the private sector, and to give an economic boost to small businesses that can use that data to provide new applications to consumers. Moreover, DTIC activities promote citizen science. Summary. DTIC protects and preserves DoD's multi-billion dollar investment in research, which empowers the acquisition enterprise through innovative tools, information systems, and decision support capabilities. The efficiency benefits can be enormous. Each 1 percent increase in the reuse of S&T efforts produces over \$100 Million in savings that can be redirected. Those savings come from elimination of inefficient redundancy (and unnecessary delays), increased community interaction, and ultimately, a more capable military. DTIC is uniquely positioned to support and to ensure the value of DoD's R&D portfolio is fully realized.		
B. Accomplishments/Planned Programs (\$ in Millions)		
Title: Defense Technical Information Center		FY 2018
FY 2019 Plans:		FY 2019
The FY 2019 National Defense Authorization Act (NDAA) directs DTIC to implement the following programs on behalf of the Department: Innovators Data Base, Global Research Watch Program, and Datasets and Data Repositories. -- Submit an action plan to OSD and the Congress in support of FY 2019 NDAA directives. -- Investigate and consider implementing technologies and tools; develop the necessary partnerships with the Services and DoD Agencies. - Deliver the next generation Search and Discovery capability, allowing customers to gain intricate knowledge of DTIC data and collections, the ability to use that data in a variety of ways, and to analyze that data through a single user-oriented solution. -- Collapse multiple user interfaces that are used to access the same data sets into a consolidated user interface that has multiple functionalities.		FY 2020
		50.040
		51.837
		52.700

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
-- Continue the effort to expose MarkLogic functionalities in this next generation Search and Discovery user interface. -- Enhance the user's ability to package relevant information generated through search and discovery for their use in research papers, presentations, and analysis and decision tools. -- Continue to encourage DoD adaptation and use of persistent open source identifiers, such as Open Researcher and Contributor ID (ORCID), in order to build complete author profiles and establish links to the author's technical documents contained within the collection. -- Improve relevance of user search and discovery results, including use of semantic technologies to pre-process metatag/label/ categorize material and to expand user search terms at runtime in order to help users--who are not experts--locate information to answer questions. - Investigate innovative commercial technologies needed to field mobile capabilities in support of user devices (desktops, laptops, tablets, etc.), operating systems, and browsers. -- Enhance current products and services to incorporate mobile technologies, such as responsive designs and mobile application integration. - Continue to develop Access and Identity Management technologies to further protect DTIC data and enhance visibility of a user's path through DTIC products and services. -- Initiate implementation of a commercial off-the-shelf access and identity management system that replaces the current DTIC Registration system on both NIPR and SIPR. - Enable the defense community to locate the most relevant technical information by leveraging the Master Data Repository (MDR) solution. -- Complete effort to surface richer metadata describing DTIC Technical Reports. -- Complete effort to feed richer metadata describing DTIC Technical Reports to public search sites. -- Initiate effort to surface richer metadata describing Information Analysis Center (IAC) Technical Reports. - Continue to broaden and expand DTIC collections to include material from the Department's Rapid Fielding and Prototyping communities, which fall under the Research, Development, Test, and Evaluation (RDT&E) Budget Activity (BA) 4, Advanced Component Development and Prototypes (ACD&P). -- Continue to develop, build and foster collaboration, partnerships, and business relationships with leadership elements from within these communities. - Continue consolidation efforts/plans for one primary interface with collection products/tools on the Defense Logistics Agency (DLA) server; begin the integration of the Unified Research & Engineering Database (URED) into DTIC's Enterprise Content Management System (ECMS). DoD-funded research documents may be submitted for inclusion into DTIC using the ECMS, a secure online platform. -- Update Communities of Interest (COI) of both main and sub-area data fields within the (legacy) URED Input application (in case URED integration into ECMS is not completed in ample time, by the annual start of the URED Defense-wide Data Call's official reporting period).			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
- Continue supporting efforts to incorporate system enhancements on the DoD Grant Awards System in FY 2019 to reflect increased attention on grants data and possible changes to DoD requirements/policies--as received by the Product Owner/ OUSD(R&E). - Expand usage of DTIC auto-indexing (MetaTagger) to other DoD components and Federal partners. - Collaborate with the DoD Intelligence community and other OSD representatives on policy and implementation of the new Controlled Unclassified Information (CUI) federal marking regulations, as DoD rewrites the guidance for marking DoD documents. -- Create requirements for changes to DTIC systems in support of the new CUI Framework. - Support DoD's public access effort; conduct outreach and educate intramural and extramural researchers on the requirement to submit journal articles to DTIC. -- Establish a pilot project to accept submissions of data management plans (DMPs) for DoD-funded research programs. -- Initiate an independent study and develop a prototype to examine options for the management of digitally formatted scientific datasets for internal DoD use. -- Initiate development of a catalog/locator of DoD-funded data sets using discovery and descriptive metadata. -- Integrate the search and display features of existing DTIC products with public access materials. -- Examine the feasibility of integrating other federal agency submission flows for publications, metadata and/or data sets in order to reduce the burden of multi-funded researchers, and aid in compliance measures. -- Extend existing collaborations with other federal agencies to comply with public access requirements. - Expand customer outreach efforts to the R&E community. -- Build and foster relationships to further enable scientific collaboration by researchers, scientist, and engineers across the services. -- Further engage Communities of Interest (COIs), DoD Labs, Combatant Commands (CCMDs), and service schools for DTIC growth opportunities. -- Continue to reach out to industry partners in order to share both information and DoD customer requirements. -- Seek out new opportunities supporting collaboration. - Achieve and maintain SIPRNet parity in the DTIC Information Technology (IT) environment for core products. -- Complete implementation of technical processes that apply enhancements to NIPR and SIPR simultaneously. -- Ensure the DTIC Information Technology (IT) infrastructure and equipment can fully provide DTIC's capabilities equally to users on SIPRNet and NIPRNet. - Establish baseline to develop a fully functional IT Continuity of Operations (COOP) capability for DTIC's unclassified infrastructure. -- Achieve Full Operational Capability (FOC) for reliable data management to include data backup and restoral of DTIC information. -- Complete an approved and executable IT COOP plan; plan and design SIPRNet COOP infrastructure.			
			FY 2020

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
-- Fully integrate efforts with concurrent Cloud services planning to provide required infrastructure to support and sustain the future COOP environment. -- Complete the design and implementation of the cyber security architecture; implement Risk Management Framework (RMF) continuous monitoring for full COOP capabilities. - Continue the migration of DTIC's information systems and services to Cloud based infrastructure. -- Align with DoD cloud efforts; leverage enterprise-wide solutions, platforms, and contract vehicles. -- Complete the migration of DTIC's public infrastructure to Cloud environments as planned, allowing DTIC staff to focus on more complex activities, and improving IT infrastructure availability. -- DTIC will have an approved Authority To Operate (ATO) with a continuously monitored Risk Management Framework (RMF) for its Cloud-based IT infrastructure, strengthening its Cyber security posture. -- Implement Cloud based identity management system enhancements and actionable user metrics. -- Complete the establishment of well-defined processes and procedures for operating in the Cloud environments. -- Establish DTIC contracts and service level agreements with selected Cloud Service Providers (CSP). - Continue to publish the R&E Journal at the CUI and Classified levels in order to share information throughout the R&E community. -- Expand marketing and awareness of the Journal; seek out a broader pool of article contributors and peer reviewers to highlight the work of DoD researchers. -- Publish supplemental and special edition issues. -- Initiate development of a Portfolio of DoD Journals on DTIC sites to enhance collaboration, synergy, and knowledge development. FY 2020 Plans: - Continue efforts to increase search and discovery efficiency and Semantic (machine learning) mapping of technical information for comprehensive, precise retrieval--built on DTIC's custom thesaurus (downloadable for use across the DoD, as well as U.S. allied partners). -- Invest in the latest search technology to offer users a complete data picture of DoD-funded research; reduce the expertise users must hold to find relevant information. -- Present users with enhanced navigation features and search capabilities. - Advance Mobile capabilities; refine application development and delivery for the most dynamic services requiring frequent updates. -- Field DTIC tools compatible with mobile platforms used by the customer base. -- Enhance security through continuous updates needed to maintain currency with mobile devices and technologies. - Evaluate options to replace DTIC's custom access and identity management solution to support growing user authentication methods expanding beyond PKI credentials (CAC, PIV, PIVi, ECA) preparing to support biometric and emerging approaches.			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
-- Implement new access and identity management system on both NIPR and SIPR platforms. - Continue maturation of the Master Data Repository (MDR). -- Complete effort to surface richer metadata describing Information Analysis Center (IAC) Technical Reports (TRs). -- Initiate development of an Application Programming Interface (API) for organizations to pull data from MDR and to federate searches to MDR. -- Establish links across data, enabling integrated displays of project, organization, topic, and user data. -- Integrate budget data, grants, contracts, reference data, and legacy access logs. -- Evaluate out-of-the-box advanced security and compatibility with Controlled Unclassified Information (CUI) policies and off-the-shelf Identity Access Management System. - Implement MDR internal interfaces for the DTIC staff to test the system, manage content, and assist users. - Expand DTIC collections; develop requirements for a submission compliance tool to assist in ensuring all relevant information is being collected, and made available to the DoD Community. -- Continue consolidation efforts/plans for one primary interface with collection products/tools on the Defense Logistics Agency (DLA) server--proceeding with the integration of Unified Research & Engineering Database (URED) into DTIC's Enterprise Content Management System (ECMS). -- Continue supporting efforts to incorporate system enhancements on the DoD Grant Awards System to reflect increased attention on grants data and possible changes to DoD requirements/policies, as received by the Product Owner/USD(R&E). -- Research and provide recommendations on technologies as a means to maintain traceability of documents disseminated by DTIC (e.g., blockchain). Provide the ability to trace what happened to the information once it leaves the DTIC network. -- Implement the capability to provide reference links within and across documents/datasets/metadata to allow users to view information in a more meaningful way. -- Implement a pilot to maintain document authenticity and integrity after dissemination beyond DTIC environment. -- Implement and deploy Document Similarity capability to further combat Fraud, Waste and Abuse (FW&A); strengthen FW&A detection capabilities. - Collaborate with the DoD Intelligence community and other OSD representatives on policy and implementation of the new Controlled Unclassified Information (CUI) federal marking regulations, as DoD coordinates the guidance for marking DoD documents. -- Upon release of OSD guidance/policies, initiate implementation of CUI changes to DTIC systems. - Support DoD's public access effort; conduct outreach and educate intramural and extramural researchers on the requirement to submit journal articles to DTIC. -- Implement an automatic authentication method for contractors/grantees journal article input. -- Begin to accept voluntary input of metadata pointing to data sets for internal DoD use. - Expand R&E engagement and outreach to the Research and Engineering customer base. -- Engage USD(R&E) Directors to support the Department's development of lethality, partner engagement, and modernization.			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
-- Continue to conduct site visits to DoD labs to share information on submitting content and DTIC products and services -- Establish information sharing/repositories with business partners, such as the Strategic Capabilities Office (SCO), Defense Innovation Units, and the Missile Defense Agency (MDA). -- Increase understanding and foster communication between the research community and warfighters to focus efforts on immediate solutions to COCOM problems. - Continue efforts to achieve SIPRNet parity for core products. - Implement failover capabilities for IT Continuity of Operations (COOP) support systems using common security, authentication and identity management solutions. -- Fully implement COOP failover systems for all systems with cloud services as the primary, where appropriate. - Support DoD Cloud Computing Strategy by fostering adoption of Cloud Computing by completing migration of NIPRNet/SIPRNet hosting environments. -- Optimize Data Center consolidation compliance by leveraging technologies within new Cloud Service Provider environments. -- Implement container images or similar technologies to further efficiencies deploying applications between development and staging environments. - The FY 2019 National Defense Authorization Act (NDAA) directs DTIC to implement the following programs on behalf of the Department: Innovators Data Base, Global Research Watch Program, and Datasets and Data Repositories. -- Working within the Department's direction, continue to mature selected implementing technologies and tools as resources allow; continue to develop the necessary partnerships with the Services and DoD Agencies. - Continue to publish the R&E Journal at the CUI and Classified levels in order to share information throughout the R&E community. -- Publish supplemental and special edition issues. -- Evaluate options for increasing the publication schedule. -- Continue the Portfolio of DoD Journals initiative enhancing DoD scientist/researcher opportunities to gain: peer review, performance evaluation, acknowledgement, and monetary bonus. FY 2019 to FY 2020 Increase/Decrease Statement: In the FY 2018 President's Budget, the Department recapitalized DTIC across the FYDP. The \$0.863 Million increment in the current FY 2020 PB builds upon FY 2018-19 activities and progress towards meeting urgent operational mission requirements: - Improvements to DoD search tools. - Identity management and information protection. - Re-establishment of an IT COOP. - Parity of services on SIPRNet. - Migration to cloud services.			
			FY 2020

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 001 / <i>Defense Technical Information Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
- Support of Public Access/citizen science. - Address technology shortfalls in user interface and the continuing migration of users to mobile devices. - The Department's implementation of Controlled Unclassified Information (CUI) marking. DTIC's investment in new tools and capabilities will address customer needs and underwrite the innovation necessary to support DoD's enduring mission to provide combat-ready military forces to deter war and protect the security of our nation.			
Accomplishments/Planned Programs Subtotals		50.040	51.837
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
Figures reflect FY 2018 end-of-year data.			
Total Unique DTIC NIPRNet Users: 42,516 Total Unique DTIC SIPRNet Users: 5,625 Total Unique IAC (CSIAC, DSIAC, and HDIAC) Users: 130,062 Total DTIC Users: 178,203			
Total scientific and technical information (STI) holdings in DTIC collections: 4.280 Million			
STI added and updated to DTIC Collection: 80,345 - Total STI (NIPRNet and SIPRNet) Added: 69,970 - Total STI (NIPRNet) Updated: 10,375			
STI records downloaded to Public: 60.9 Million Records downloaded to DoD NIPRNet: 944.3 Thousand			
Total unique website visits: 16.9 Million			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / Defense Technical Information Center	Project (Number/Name) 001 / Defense Technical Information Center

Total page views: 127.7 Million

IAC Customer Technical Support Requests for Analysis: 3,757

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center										Date: March 2019		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605801KA / Defense Technical Information Center				Project (Number/Name) 002 / Information Analysis Centers			
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
002: Information Analysis Centers	24.297	5.074	5.016	5.016	-	5.016	5.016	5.016	5.016	5.016	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DoD Information Analysis Centers (IACs), established under DoD Instruction 3200.14, serve as a vital resource in providing timely, relevant information directly to users when and where it is needed. IACs serve as a bridge between the warfighter and the Acquisition/Research community, providing essential technical analysis and data support to a diverse customer base, to include the Combatant Commands (CCMDs), the Office of the Secretary of Defense, Defense Agencies, and the Military Services. IACs actively partner and collaborate with Defense Research and Engineering (R&E) focus groups and communities of interest in areas of specialized fields or specific technologies. The IACs create and maintain comprehensive knowledge analysis centers that include historical, technical, scientific, and other data and information collected worldwide. They are staffed with scientists, engineers and information specialists to provide research and analysis to customers with diverse, complex and challenging requirements. IAC operations, in concert with 2018 National Defense Strategy objectives, directly support the warfighter, and play an ongoing and critical role in solving key CCMD operational issues such as cyber security, unmanned aerial vehicle visual/audible signature reduction, and improvements to the ballistic resistance of body armor.

The IAC Program Management Office at DTIC performs contract acquisition, management, and operational support for IAC contract operations and the technical information that is generated as a result of research and studies. In a time of shrinking budgets and increasing responsibility, IACs are a valuable resource for accessing scientific and technical information culled from efforts to solve new and historic challenges. Direct IAC customer support activities, such as Technical Area Task (TAT) order processing, Basic Center Operations (BCO) support, Defense Finance and Accounting Service (DFAS) activities, contracting/acquisition related activities, etc., are funded in part through partnerships with the Defense R&E community and the annual collection of customer reimbursements for their share of direct costs, in accordance with the IAC Reimbursable Review Board (IRRB) recommendations. This represents the maximum cost-sharing with IAC customers allowable, per guidance from the OSD Office of General Counsel. Annual IAC efforts and accomplishments are dependent on the level of participation and collaboration by the R&E community at large.

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

Title: Information Analysis Centers	FY 2018	FY 2019	FY 2020
FY 2019 Plans: - Support the DTIC mission to provide technical reports to DoD. - Provide administrative and operational oversight of basic core contract activities for DoD IACs to collect, analyze, synthesize and disseminate worldwide scientific and technical information (STI) in support of DoD's critical technologies and the warfighter.	5.074	5.016	5.016

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 002 / <i>Information Analysis Centers</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2018	FY 2019
- Respond to technical inquiries (average 400 per month) and provide in-depth science and technology (S&T) analysis; create and provide STI results via IAC websites; capture STI products from new/on-going analysis tasks; and support the exchange of information among members of the operational and technical communities. - Manage and support Technical Area Tasks (TATs) ordered by the DoD and non-DoD customers; provide program strategy and ensure alignment with Department goals/direction. - Begin making new Task Order awards to the IAC MAC contract (awarded in September 2018) from Homeland Defense, Defense Systems, and Cyber Systems contacts; close these contracts to new awards while continuing work on existing Task Orders. - Award the Record Digitization small business contract (\$4 Million) for the purpose of digitizing over 1 million hardcopy, microfiche, and microfilm technical documents for preservation and ease of discovery. FY 2020 Plans: - Support the DTIC mission to provide technical reports to DoD. - Provide administrative and operational oversight of basic core contract activities for DoD IACs to collect, analyze, synthesize and disseminate worldwide scientific and technical information (STI) in support of DoD's critical technologies and the warfighter. - Respond to technical inquiries (average 400 per month) and provide in-depth science and technology (S&T) analysis; create and provide STI results via IAC websites; capture STI products from new/on-going analysis tasks; and support the exchange of information among members of the operational and technical communities. - Manage and support Technical Area Tasks (TATs) ordered by the DoD and non-DoD customers; provide program strategy and ensure alignment with Department goals/direction. - Continue awarding Task Orders on the IAC MAC contract (awarded in September 2018) in support of Department R&D goals; close legacy MACs to new awards while continuing work on existing Task Orders. -- Assess first year of IAC MAC usage; adjust processes as necessary. - Expand customer base, incorporate new technologies as needed to align to USD(R&E) priorities. - Award Defense Systems Basic Center of Operations (small business) contract by 1st Quarter FY 2020. FY 2019 to FY 2020 Increase/Decrease Statement: - There is no change in the FY 2020 Base, as compared to the FY 2019 Base.			
Accomplishments/Planned Programs Subtotals		5.074	5.016
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Technical Information Center		Date: March 2019
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA / <i>Defense Technical Information Center</i>	Project (Number/Name) 002 / <i>Information Analysis Centers</i>
<u>D. Acquisition Strategy</u> N/A		
<u>E. Performance Metrics</u> Figures reflect FY 2018 end-of-year data. Number of: - IAC web inquiries: 1,224,451 - IAC technical inquiries: 3,757 - STI documents added to IAC collection: 28,724 - STI documents generated by Technical Area Task (TAT) activities: 2,414 - Training or meeting events: 87 - Number of training attendees: 15,903 - Documents uploaded to DTIC's online repository: 60,504 Amount of funding: - Provided by external customer requesting IAC technical analysis (TAT Funding): \$1.9 Billion Customer satisfaction regarding: - IAC products and technical inquiry support (scale of 1 to 5, 5 being best): 4.77 - IAC TATs and training (scale of 1 to 5, 5 being best): 5.0		