Department of Defense Fiscal Year (FY) 2018 Budget Estimates

May 2017



Defense Technical Information Center

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

UNCLASSIFIED

UNCLASSIFIED							
THIS PAGE INTENTIONALLY LEFT BLANK							

Defense Technical Information Center • Budget Estimates FY 2018 • RDT&E Program

Table of Volumes

Defense Advanced Research Projects Agency	
Missile Defense Agency	Volume 2
Office of the Secretary Of Defense	Volume 3
Chemical and Biological Defense Program	Volume 4
Defense Contract Management Agency	Volume 5
DoD Human Resources Activity	Volume 5
Defense Information Systems Agency	
Defense Logistics Agency	
Defense Security Cooperation Agency	Volume 5
Defense Security Service	
Defense Technical Information Center	Volume 5
Defense Threat Reduction Agency	
The Joint Staff	
United States Special Operations Command	Volume 5
Washington Headquarters Service	Volume 5
Operational Test and Evaluation, Defense	Volume 5

Defense Technical Information Center • Budget Estimates FY 2018 • RDT&E Program

Defense Geospatial Intelligence Agency	.(see N	IP aı	nd MIP	Justification	Books)
Defense Intelligence Agency	. (see N	IP ar	nd MIP	Justification	Books)
National Security Agency	.(see N	IP ar	nd MIP	Justification	Books)

Defense Technical Information Center • Budget Estimates FY 2018 • RDT&E Program

Volume 5 Table of Contents

Comptroller Exhibit R-1	Volume 5 - v
Program Element Table of Contents (by Budget Activity then Line Item Number)	Volume 5 - xvii
Program Element Table of Contents (Alphabetically by Program Element Title)	Volume 5 - xix
Exhibit R-1	Volume 5 - xx
Exhibit R-2's	Volume 5 - 1

UNCLASSIFIED							
THIS PAGE INTENTIONALLY LEFT BLANK							

Department of Defense FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req
Research, Development, Test & Eval, DW	57,133	48,234	48,234				
Total Research, Development, Test & Evaluation	57,133	48,234	48,234				

Department of Defense FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Research, Development, Test & Eval, DW	48,234	48,234		48,234	58,332		58,332
Total Research, Development, Test & Evaluation	48,234	48,234		48,234	58,332		58,332

Department of Defense FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

17 May 2017

Summary Recap of Budget Activities	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req
Management Support	57,133	48,234	48,234		*		
Total Research, Development, Test & Evaluation	57,133	48,234	48,234				
Summary Recap of FYDP Programs							¥
Research and Development	57,133	48,234	48,234				
Total Research, Development, Test & Evaluation	57,133	48,234	48,234				()

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 17, 2017 at 14:17:45

Department of Defense FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

17 May 2017

Summary Recap of Budget Activities	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Management Support	48,234	48,234		48,234	58,332		58,332
Total Research, Development, Test & Evaluation	48,234	48,234		48,234	58,332		58,332
Summary Recap of FYDP Programs							
Research and Development	48,234	48,234		48,234	58,332		58,332
Total Research, Development, Test & Evaluation	48,234	48,234		48,234	58,332		58,332

R-IC1F: FY 2018 President's Budget Request (Published Version), as of May 17, 2017 at 14:17:45

Defense-Wide FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

17 May 2017

Summary Recap of Budget Activities	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Management Support	57,133	48,234	48,234				
Total Research, Development, Test & Evaluation	57,133	48,234	48,234				
Summary Recap of FYDP Programs							
Research and Development	57,133	48,234	48,234				
Total Research, Development, Test & Evaluation	57,133	48,234	48,234				

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 17, 2017 at 14:17:45

Defense-Wide

FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Summary Recap of Budget Activities	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Management Support	48,234	48,234		48,234	58,332		58,332
Total Research, Development, Test & Evaluation	48,234	48,234		48,234	58,332		58,332
Summary Recap of FYDP Programs							
Research and Development	48,234	48,234		48,234	58,332		58,332
Total Research, Development, Test & Evaluation	48,234	48,234		48,234	58,332		58,332

Defense-Wide FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req
Defense Technical Information Center	57,133	48,234	48,234				
Total Research, Development, Test & Evaluation	57,133	48,234	48,234				

Defense-Wide

FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Defense Technical Information Center	48,234	48,234		48,234	58,332		58,332
Total Research, Development, Test & Evaluation	48,234	48,234		48,234	58,332		58,332

Defense-Wide FY 2018 President's Budget Request

Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

17 May 2017

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	
											7
163	0605801KA	Defense Technical Information Center (DTIC)	06	57,133	43,834	43,834					υ
167	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06		4,400	4,400					U
	Manag	ement Support		57,133	48,234	48,234					
Tota	l Research,	Development, Test & Eval, DW		57,133	48,234	48,234					

Defense-Wide

FY 2018 President's Budget Request

Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0400D Research, Development, Test & Eval, DW

Program Line Element No Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total	S e c
163 0605801KA	Defense Technical Information Center (DTIC)	06	43,834	43,834		43,834	54,145		54,145	U
167 0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	4,400	4,400		4,400	4,187		4,187	U
Manag	gement Support		48,234	48,234		48,234	58,332		58,332	
Total Research,	Development, Test & Eval, DW		48,234	48,234		48,234	58,332		58,332	

Defense Technical Information Center FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

17 May 2017

Appropriation: 0400D Research, Development, Test & Eval, DW

Line	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	Remaining Req with CR Adj	
163	0605801KA	Defense Technical Information Center (DTIC)	06	57,133	43,834	43,834					υ
167	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06		4,400	4,400					υ
Ма	nagement S	upport		57,133	48,234	48,234					
Total	Defense T	echnical Information Center		57,133	48,234	48,234					

Defense Technical Information Center FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

17 May 2017

Appropriation: 0400D Research, Development, Test & Eval, DW

	Program Element Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total	s e c
163	0605801KA	Defense Technical Information Center (DTIC)	06	43,834	43,834		43,834	54,145		54,145	U
167	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	06	4,400	4,400		4,400	4,187		4,187	U
Me	anagement S	support		48,234	48,234		48,234	58,332		58,332	
Total	L Defense T	echnical Information Center		48,234	48,234		48,234	58,332		58,332	

Defense Technical Information Center • Budget Estimates FY 2018 • RDT&E Program

Program Element Table of Contents (by Budget Activity then Line Item Number)

Appropriation 0400: Research, Development, Test & Evaluation, Defense-Wide

Line #	Budget Activit	y Program Element Number	Program Element Title Pa	ge
163	06	0605801KA	Defense Technical Information Center	 - 1
167	06	0605998KA	Management HQ - Defense Technical Information Center (DTIC)Volume 5 -	19

THIS PAGE INTENTIONALLY LEFT BLANK	UNCLASSIFIED							
	THIS PAGE INTENTIONALLY LEFT BLANK							

Defense Technical Information Center • Budget Estimates FY 2018 • RDT&E Program

Program Element Table of Contents (Alphabetically by Program Element Title)

Program Element Title	Program Element Number	Line #	BA Page
Defense Technical Information Center	0605801KA	163	06Volume 5 - 1
Management HQ - Defense Technical Information Center (DTIC)	0605998KA	167	06Volume 5 - 19



Defense Technical Information Center • Budget Estimates FY 2018 • RDT&E Program Exhibit R-1

(Listing by Budget Activity, then Program Element Number)

BA# 06: RDT&E Management Support

Cost (\$ in Millions)

Line#	BA#	PE#	PE Title	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
163	06	0605801KA	Defense Technical Information Center	106.813	57.133	43.834	54.145	-	54.145
167	06	0605998KA	Management HQ - Defense Technical Information Center (DTIC)	0.000	0.000	4.400	4.187	-	4.187
Total: RDT&E	Manag	ement Support		106.813	57.133	48.234	58.332	-	58.332



Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:

PE 0605801KA I Defense Technical Information Center

Date: May 2017

RDT&E Management Support

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	106.813	57.133	43.834	54.145	_	54.145	57.647	59.348	61.302	63.454	Continuing	Continuing
001: Defense Technical Information Center	94.012	51.385	38.086	49.071	-	49.071	52.631	54.332	56.286	58.438	Continuing	Continuing
002: Information Analysis Centers	12.801	5.748	5.748	5.074	-	5.074	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, is the DoD's singular executive agent and designated source for DoD-funded scientific, technical, engineering, and industry-related information. DTIC also operates DoD Information Analysis Centers (IACs) focused on Defense Systems, Cyber Security and Information Systems, and Homeland Defense and Security.

Each year, DoD invests over \$12.0 Billion in research, development and procurement of advanced technologies needed to 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 provides nearly instantaneous answers to researchers seeking state-of-the-art data relevant to their projects. DTIC regularly prevents duplication of experiments, tests, and prototyping activities because researchers can see what has already been done in their field of effort, even if prior research resulted in a dead end. Their work can pick up from the point of most recent results. Using DTIC-created forums, researchers, Warfighters, and industry partners can also rapidly collaborate and connect across the DoD research and 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. 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).

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

Page 1 of 17

R-1 Line #163

Volume 5 - 1

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support

PE 0605801KA I Defense Technical Information Center

- 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, redundancy, and mission flexibility; to reduce time to deliver new capabilities; to save costs; and to enhance cyber security.

DTIC recognizes the need to accomplish its mission while increasing the value of its services and products in an environment of Department-wide budget reductions. DTIC has reduced its headquarter staffing, physical footprint, civilian personnel and support contractors. DTIC has restructured the IAC program, and continues to consolidate its data center.

Despite reduced budgets, DTIC has taken on additional programs, to include its new role in leading the Department in efforts to provide public access to DoD-funded journal articles and research data and increase outreach to industry through DTIC's Defense Innovation Marketplace. Moreover, DTIC activities promote citizen science. Citizen science mobilizes the public to engage in the scientific process and thereby address real-world problems. Citizen scientists identify research questions, collect and analyze data, interpret results, make new discoveries, develop technologies and applications, and solve complex problems. DTIC continues to ensure its activities are efficient and effective, meet users' expectations, and employ industry best practices and standards, while protecting its wealth of information from cyber threats.

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 Procurement and Acquisition Policy in a January 2015 memo wherein he promoted maximum use of the IAC contracts across DoD. 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. 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 perform over \$1.0 Billion of customer-funded research and prototyping annually. The results of the work are a rich source of new material in DTIC's information asset collections 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.

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 2 of 17

R-1 Line #163

Volume 5 - 2

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center

Date: May 2017

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:

RDT&E Management Support

R-1 Program Element (Number/Name)

PE 0605801KA I Defense Technical Information Center

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	56.775	43.834	45.504	-	45.504
Current President's Budget	57.133	43.834	54.145	-	54.145
Total Adjustments	0.358	0.000	8.641	-	8.641
 Congressional General Reductions 	0.000	-			
 Congressional Directed Reductions 	0.000	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			
Program Change	0.358	-	9.055	-	9.055
 Service Requirements Review Board 	-	-	-0.592	-	-0.592
(SRRB) Reduction					
 Program Adjustments 	-	_	0.178	-	0.178

Change Summary Explanation

Specific changes to the FY 2018 program (a net increase of \$8.641 Million from the previous FY 2018 PB Base) are outlined below:

FY 2018 Program Changes: The Department added \$9.055 Million to the FY 2018 DTIC program as a means of resetting the DTIC budget top-line, which had seen a general decline since FY 2011. Absent the requested increase, DTIC would be forced to cease most capability development and to limit efforts on cybersecurity. These constraints would translate to increased risk on the cybersecurity front and reduced search and retrieval effectiveness, i.e., DoD researchers would incur increased costs and delays in solving technology challenges related to fielding needed warfighting capabilities.

The funding infusion enables DTIC to keep closer pace with the advance of the state of the art in the science and technology data collections, to refresh outdated and increasingly unsupportable infrastructure, to pursue strategic improvement in tools used by users to search and find needed information, and to begin DTIC's migration to a cloud host. Marketplace realities force DTIC to refresh commercial-off-the-shelf technologies supporting information search, storage, and retrieval. These upgrades are driven by constant evolution of information technology and the reality that vendors enhance or discontinue products as a means of remaining competitive. This dynamic is not new. The eight previous search engines DTIC deployed, over two decades, have been discontinued by the manufacturer. In addition, user identity management continues to evolve, and DTIC must keep pace. In recent years, DTIC has added support for multiple variants of the government Public-Key Infrastructure card (CAC) used by DoD, other Federal Agencies, industry, and other commercial entities. In the future, we must be ready to accept other identification tokens and biometric identifiers. Finally, DTIC must find ways to support a growing variety of platforms, devices, and interfaces. Ten years ago, 99 percent of DTIC users were on Windows/IE desktop platform. Added funding will allow DTIC to deliver improved search and discovery tools, to simplify access and identity management while increasing cyber security, to provide access on our users' platform of choice – expanding to deliver to mobile devices (tables and mobile devices), and to migrate to cloud hosting. Cloud hosting merits special mention because of its promise to allow DTIC professionals

UNCLASSIFIED
Page 3 of 17

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support

PE 0605801KA I Defense Technical Information Center

to move their focus from infrastructure maintenance to more strategic functions. Cloud hosting will enable DTIC to be more flexible and agile in meeting our mission objective and increase our ability to innovate. Use of cloud technologies to support COOP capabilities were delayed by DoD security concerns requiring policy changes for the Federal Risk and Authorization Management Program (FedRAMP). Revised FedRAMP guidance and vendor certification now allow DTIC to reconstitute this critical capability. The requested additional funding will allow increased collaboration with our partners, and allows further outreach and increased ability to educate and bring awareness to the importance of sharing their results with the community through DTIC. Funding also promotes increased attendance at scientific conferences and outreach to DoD laboratories, partnership with COCOM S&T staffs, etc., in DTIC's primary mission to find, collect and ingest S&T data for the purpose of sharing with the larger community.

New funding supports key initiatives to develop and implement new technologies. These include search and discovery infrastructure; IT COOP reconstitution; data center consolidation and transition to cloud computing; mobile technology; user access and identity management; Controlled Unclassified Information (CUI) in support of the Executive Order 13556; Public Access to scientific data and publications, in compliance with the Executive Office of the President, Office of Science and Technology Policy; as well as efforts to address a rapidly changing and more sophisticated technological environment. While DTIC has been planning these initiatives, budget erosion and funding constraints have limited our ability to address these critical tasks. Without the Department's FY 2018 funding increase, DTIC will be unable to accomplish these initiatives. The FY 2018 investment represents a small fraction of the Department's research and development spending, and will lead to near- and long-term benefits as efficiencies in the information collection and dissemination processes are implemented. These DTIC initiatives strengthen DoD business practices and result in taxpayer savings. The FY 2018 funding increase supports the following DTIC programs/initiatives:

- Search and Discovery Infrastructure: "Search" functionality is the primary way information is shared. DTIC's funding shortfall over the past several years has reduced the effectiveness of our search. Given current funding levels, DTIC has maintained basic functionality, but has not been able to improve and incorporate new search technologies and user interfaces. This shortfall directly effects users. It makes them work harder to find the most relevant, applicable, and essential information in DTIC's collections. In a practical sense, with the Department spending \$12.0 Billion in science and technology funding per year, limited "search" capability drives up costs in the form of duplication of "search" effort, pursuing trails of approaches that have already shown to fail, and inability to find relevant research results. DTIC must invest in the latest "search" technologies to offer users a complete data picture of DoD-funded research results and reduce the expertise users must hold to find relevant information.
- DTIC IT COOP Reconstitution: DTIC holds and manages over 4 million records in its collection. Funding enables DTIC to reconstitute its Continuity of Operations (COOP) systems/servers (mission-essential functions) within the 12-hour timeframe required by Department of Defense Directive 3020.26 if a catastrophic event were to take the primary system off-line. The investment lessens the risk associated with the extended loss of access to DoD-funded research data and the inability for DTIC to collect new research results. Funding supports the analysis of alternatives, system architecture, cyber risk management framework documentation/accreditation, system engineering, software development, testing, hardware procurement, software licenses, storage, and bandwidth.
- Data Center Consolidation/Cloud Computing Transition: The Federal Data Center Consolidation Initiative (FDCCI) directs the reduction in physical servers and the consolidation of data centers. DTIC has reduced the number of its physical servers by 60 percent and moved to a virtualized server environment. Outsourcing to the cloud will enable DTIC to focus more resources on our core mission--delivering information through innovative applications, rather than

PE 0605801KA: Defense Technical Information Center
Defense Technical Information Center

UNCLASSIFIED
Page 4 of 17

R-1 Line #163

Volume 5 - 4

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support

PE 0605801KA I Defense Technical Information Center

maintaining an IT platform. DTIC information services will become more flexible and innovative, shortening the gap between testing and implementation of DoD weapon systems. To operate effectively in cloud environments, DTIC must reengineer much of its information pipeline. The funding request supports the analysis of alternatives, system architecture, system engineering, cyber risk management, necessary architecture and software modifications, services costs (servers, storage, bandwidth, management, etc.), testing, and software licensing.

- Mobile and Emerging Platform technology: DTIC serves a diverse audience. DoD users, industry partners, and academic researchers have moved from a traditional desktop Windows Internet Explorer (IE) environment to an array of devices (desktops, laptops, tablets, and mobile), operating systems, and browsers. To remain relevant, DTIC must ensure products and interfaces support these new devices. If new technology is not pursued, large portions of DTIC's user community will be lost. FY 2018 funding supports the analysis of alternatives, metrics, software development, testing, hardware, licenses, cyber security, and Risk Management Framework (RMF)/accreditation.
- Controlled Unclassified Information (CUI): In September 2016, the National Archives and Records Administration (NARA, specifically the Information Security Oversight Office) released final guidance to execute the CUI effort throughout the Executive Branch. This guidance supported the President's Executive Order 13556, issued in November 2008, Controlled Unclassified Information (CUI). The EO directed the National Archives and Records Administration (NARA) as the CUI Executive Agent to standardize the way the Executive Branch handles information (excluding information that is classified). Distribution of information outside of the DoD is only allowable when documents are marked to the new CUI standards, including categories that will require portion marking. The term "Controlled Unclassified Information" ("CUI") will start being used by the Department in 2017, phasing out the term "For Official Use Only" ("FOUO"). As the Department's unique central repository and distribution source for technical information, DTIC must modify their collection, storage, and distribution systems to recognize and properly handle new marking and distribution standards. Lacking establishment of these new systems and proper CUI marking, the DoD would lose much of its ability to share material with other Federal Government agencies, industry partners, and allies. Added funding supports the initiation of steps needed to support new CUI standards, namely: policy development, system requirements planning, cyber security assessments, software prototyping, and development of user training.
- Public Access: The Executive Office of the President (EOP)/Office of Science and Technology Policy (OSTP) issued a memorandum directing Federal agencies that spend more than \$100 Million per year on research and development (R&D) to develop plans to support increased access to the results of research funded by the Federal government. As the Department's central repository of DoD-funded technical information, DTIC was tasked with implementing the infrastructure to collect and disseminate journal articles, manuscripts and digital data that are the result of DoD-funded research. In FY 2017, DoD issued new policy to internal researchers to develop data management plans and submit authors' manuscripts for journal articles. Funding allows DTIC to continue work with DoD Labs; educate and train researchers of new requirements; develop policy for external researchers (contracts and grants), submission compliance measures, and user facing tools; and evaluate and prototype the handling of data sets. Supporting data sets bring with it a range of complex issues caused by the variety of sciences and their output, and the sheer sizes that can grow to petabytes.

FY 2018 Service Requirements Review Board (SRRB) Reduction: \$.592 Million reduction to the DTIC program is the result of the Department's recent service contract downsizing effort.

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 5 of 17

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical	al Information Center	Date: May 2017
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center	
FY 2018 Program Adjustments: reflects the net change of economic	assumptions and/or pricing adjustments.	

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

Exhibit R-2A, RDT&E Project J	Justification:	FY 2018 D	efense Tec	hnical Infor	mation Cen	iter				Date: May	2017	
Appropriation/Budget Activity 0400 / 6					_	01KA <i>I Def</i> e	t (Number/ nse Technic	•	Project (N 001 / Defer		ne) al Informati	on Center
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
001: Defense Technical Information Center	94.012	51.385	38.086	49.071	-	49.071	52.631	54.332	56.286	58.438	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 Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and the DoD scientific & 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 is 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 either the Common Access Card (CAC), External Certificate Authority (ECA), or Personal Identity Verification (PIV) cards. DTIC's unclassified assets, tools and community interaction capabilities foster innovation, competition and identification of solutions in an access-controlled environment.

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 7 of 17

R-1 Line #163

Volume 5 - 7

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Technical Infor	rmation Center		Date: May 2017
Appropriation/Budget Activity 0400 / 6	,	- 3 (umber/Name) nse Technical Information Center

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 ASD(R&E)/AT&L, DTIC's priority is the RDT&E enterprise, hosting information assets and tools on the NIPRNET (the primary network for the community).
- 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 and Academia 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. 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.

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)	FY 2016	FY 2017	FY 2018
Title: Defense Technical Information Center	51.385	38.086	49.071
FY 2016 Accomplishments: - Implemented and deployed a new, commercially available search, which leveraged the new Master Data Repository (MDR), to enable users to discover more relevant science and technology information faster by refining their search using Boolean, wildcards, nesting, truncation, stemming, phrases and proximity operators. - Implemented two-factor authentication to DTIC collections through the use of External Certificate Authority (ECA) and Personal Identity Verification (PIV) cards for 98 percent of DTIC users, increasing security to limited DoD data, while easing access for authenticated users. - Supported DoD's public access effort, including policy development for intramural basic research. Continued to expand publicly-available content in support of the Department's Citizen Science objectives. During FY 2016, the number of full-text journal articles provided by publishers through PubDefense increased by 1,267, while publicly accessible citations for embargoed articles increased by 2,445. Established DTIC public access interface to provide users with a public access search of DoD-funded publisher records.			

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 8 of 17

R-1 Line #163

Volume 5 - 8

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Te	echnical Information Center	Date:	May 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center	Project (Number of 001 / Defense Ted		ation Cente
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Established input template for public access journal articles Expanded Defense Innovation Marketplace search and analytic of improvement initiatives; added small business research information Employed the Marketplace to support four Technology Interchare Enterprise Dialogue, Space Enterprise, Nuclear Deterrence Operation Industry added more than 6,000 project summaries to the Indepthe Department visibility into industry's research efforts Explored the utility of Technology Domain Awareness (TDA) action the National Defense University (NDU) Extended capability of DTIC standard library content managemer Expanded capability of the Master Data Repository (MDR) solution storage infrastructure for increased analysis and visualization capa from six datasets were consolidated into the Master Data Repositoric Increased the number of technical reports, with over 30,000 add integrated search Collaborated with the DoD Intelligence community on policy and Unclassified Information (CUI) federal marking regulations Implemented Full Operating Capability (FOC) of the DoD Grant Abstracts of DoD grant awards from December 9, 2014 to present The system was established in response to a statutory requirem Appropriations Act (Division C of the Consolidated and Further Cocomponents have submitted 6,890 records (with a total anticipated database Deployed a new DoD Research and Engineering (R&E) Gateway DTIC science and technology (S&T) reports, search capabilities, a customers to find information and start working in DTIC tools faste Expanded outreach to the DTIC user community and DoD scient offering onsite briefings, demonstrations and training for the R&E (Secure Collaboration functions, which resulted in a 16 percent increase execute collaboration functions, which resulted in a 16 percent increase execute collaboration functions, which resulted in a 16 percent increase execute collaboration functions, which resulted in a 16 percent increase and polications that Planned the migration of DTIC	Inc. Inge Meetings with industry hosted by the U.S. Air Force: Antions, and Sensors Communities of Interest (COI). Interest (C	viding vith ds btive e or y I) by users.		

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Te	chnical Information Center	,	Date: N	/lay 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center		ct (Number/l Defense Tec	Name) hnical Informa	ation Cente
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
- Met DoD's audit readiness milestones and requirements.					
FY 2017 Plans: - Evaluate FY 2016 progress in semantic technology; expand sema discovery across multiple collections to identify related search topic capabilities allow. Apply semantic linking and tagging technology to new collections data. As of April 2017, the tagging technology has been utilized to the Collection with subject terms. Plan to continue expanding to include report subject groupings. The tagging technology has the ability to Addition of a semantic search option to standard keyword search - Enhance DTIC identity management by implementing the capabilistandard for two-factor authentication; enables authenticated indus companies seeking access with PIV-I are Boeing, Lockheed Martin - Support DoD's public access effort, albeit at a reduced level. Provide Department into compliance with the Office of Science and Technology (S&T Pursue collaborative efforts with other Federal agencies to leveral Establish draft guidance for data management plans (DMPs). We relevant to specific science and technology disciplines. Continue to plan for the integration of input, public access search journal articles from contractors and grantees. Continue to plan for the integration of input, public access search journal articles from contractors and grantees. Continue migrating legacy standalone collection feeds to DTIC's scloud, reducing the footprint of multiple technologies and driving efficiency in the DTIC consolidated content management system. The DTIC collection. Implement the Master Data Repository (MDR) for the DTIC collection. Implement the Master Data Repository (MDR) for the DTIC collection. Implement the Master Data Repository (MDR) for the DTIC collection.	es, concepts and associations, to the extent maturing as, such as journal articles, data set metadata and acquisit tag new technical reports and journal articles added to the communities of interest and technical readiness levels, batch process 4 million documents in under 20 days. In results. It to accept PIV-Industry (PIV-I), the federal government stry adapters to access DTIC collections and products. In an Northrup Grumman, Raytheon, and Symantec. Widing public access to federally funded research not only chnology Policy (OSTP) Memorandum, but also provides information to encourage innovation. In age existing systems and lessons learned. Or with subject matter experts to develop DMP requirem and authentication capabilities to support the submissions by expanding the search and analytic capabilities of the communications with industry for Technology Interchange standard library content management system in the DoD-ficiencies and cost avoidance. AC) Total Electronic Migration System (TEMS) collection The IACs process over 30,000 technical reports annually stions on SIPRNET. Inable users to discover more relevant science and technical users to discover more relevant science and technical users to discover more relevant science and technical reports.	tion e DTIC and thitial thitial thorngs DoD ents chosted and thitial thitial			

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 10 of 17

R-1 Line #163

Volume 5 - 10

	UNCLASSIFIED			
Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Te	echnical Information Center	Date: N	May 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center	Project (Number/ 001 / Defense Tec		ation Center
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
 Collaborate with the DoD Intelligence community and other AT&L Controlled Unclassified Information (CUI) federal marking regulation documents. Complete the enhancement of the International Agreements Data efficient integration with the database and search capability. Continue the initial evaluation and prototyping of Cloud Service FA Service (IAAS), Platform As A Service (PAAS), and Software As—Further explore options to establish a DTIC Cloud location and provided Data Center to a DoD-CIO approved Cloud Service Provestand up an initial public site (unclassified, unlimited) in a commontent to a Cloud Service Provider. 	ons, as DoD begins to rewrite its guidance for marking abase (IADB) to include re-engineering the application for revolver offerings to select the best provider for Infrastructus A Service (SaaS). Vendor; begin preparations to initiate the transition from a Dider.	re As TIC-		
FY 2018 Plans: - Deliver customers the ability to apply flexible search strategies as Continue to integrate search and analysis capabilities across all and discovery of information. - Complete upgrade and update to the search interface to incorposit with DTIC search products. - Discontinue the DTIC Google Search Appliances (GSA); transitically be persistent digital identifiers to build consolidated authorally be provide capability to automate processing of public release contests. - Reduce the footprint of multiple technologies and retire the 25-year ownership. - Conduct an analysis of alternatives to support the advancement of the contests and investigate innovative commercial technologies and represent the contests and categories within a sufficient control of the contests and categories within a sufficient terms. - Improve data quality by bridging data gaps within a single collect lake representing research project lifecycle from inception to composition.	collections on SIPRNET and NIPRNET for improved analyst are new search capabilities and improve the user experience on all search capabilities to the MDR. For profiles, and links to technical documents, and to eliminate backlog, and enable rapid availability, ear-old legacy system to drive efficiencies and reduce cost of identity management capabilities. If available government offerings, ositions; and track industry technology advancements, bject domain) with the Master Data Repository, providing incoming records to promote exploration and discovery, example, saving user time from repeated searches using setion and/or between collections, offering a homogenous dapletion.	of ta		

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 11 of 17

R-1 Line #163

Volume 5 - 11

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense	e Technical Information Center	Da	e: May 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center	Project (Num 001 / Defense	oer/Name) Technical Inform	nation Cente
B. Accomplishments/Planned Programs (\$ in Millions)		FY 20	6 FY 2017	FY 2018
 Migrate NIPR enhancements (Enterprise Content Manageme content integration) to SIPRNET. Integrate with subject tagging service and DTIC Thesaurus. Integrate cooperative agreements, acquisition data, R1s, P1 Collaborate with the DoD Intelligence community and other A Controlled Unclassified Information (CUI) federal marking regusive submit journal articles to DTIC. Collaborate with the DoD laboratories to design efficient intellinformation. Implement contractors/grantees input capability for journal at Enhance public access search to include both new and legal publisher versions. Establish pilot project to accept submissions of data manage. Begin to accept voluntary input of metadata pointing to public create catalog/locator of data sets using discovery and descentificate an independent study and a prototype to examine ope. Evaluate dataset dissemination capabilities. Deliver customer-driven features based on an improved under lamplement decision based metrics across primary DTIC promake business decisions on investments in products and service Deliver capability for DTIC program managers and product customer trends and customer tendencies in products and service Deliver capability for DTIC program managers and product customer trends and customer tendencies in products and service paths through the interface and fully capture user successes to paths through the interfaces. Conduct initial planning to establish a functional IT Continuity. Complete an IT COOP analysis of alternatives in order to procommercial technologies and government offerings. Integrate effort with concurrent cloud services planning to procommercial technologies and government offerings. Integrate effort with concurrent cloud services planning to procommercial technologies and government offerings. Integrate effort with concurrent cloud services planning to procom	s, Congressional mark-ups into Master Data Repository. T&L representatives on policy and implementation of the new dations, as DoD rewrites its guidance for marking documents. Ucate intramural and extramural researchers on the requirem grated submission mechanism for all types of public access rticles, with a mechanism to authenticate the submission. Cy journal articles submitted to DTIC, combined with pointers are ment plans (DMPs) for DoD-funded research programs. Correctly or ilmited dissemination data sets. Criptive metadata; send metadata for public data sets to data sets are to the management of digitally formatted scientific data derstanding of customer successes and experiences on our situates to improve DTIC's ability to understand customer behavinces. Dewices This will allow full visibility and transparency on product usage vices. This will allow full visibility on all user actions and interactly measuring downloads, bibliography builds and exports, and of Operations (COOP) capability for DTIC. Coduce an approved and executable IT COOP plan. Review ovide required infrastructure to support and sustain the future act initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system engineering to ensure the highest availability of the initial system.	ent to to gov. sets. es. ior and ge, actions d user		

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 12 of 17

R-1 Line #163

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Te	chnical Information Center		Date: N	/lay 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center	_	ct (Number/I Defense Tecl	Name) hnical Informa	ation Center
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
 Begin the design of a cloud system architecture and the modification improve customer support experience, reduce cost and labor, capt DoD Data Center reduction goals. Plan the transition stages for phasing DTIC's public, NIPRNET at Develop and design the Risk Management Framework (RMF) condocumentation and an update to the Authority to Operate (ATO). Design the integration of Single Sign-On capabilities, User Regist authentication methods for a new DTIC Cloud environment. Explore options to establish a contract or service level agreement from its Data Center to a Cloud Service Provider. Construct a flexible cost model to track true cost of ownership to expenditures. Continue the successful migration of public sites to a commercial Research and investigate innovative commercial technologies neoperating systems, and browsers. Conduct an analysis of alternatives to support development of model power of the commercial plans for incorporating mobile technologies to incl. 	ure user data, and improve security posture in order to mean SIPRNET activities to a cloud environment. Introls for a new DTIC Cloud environment; prepare accrestration Systems, and public key infrastructure (PKI) It with an organization or company to facilitate DTIC's transhare costs with DTIC customers and better track internal or government-provided cloud/data center. I or government-provided cloud/data center. I eded to field mobile capabilities in support of user device obile capabilities.	ditation nsition al			
	Accomplishments/Planned Programs Su	btotals	51.385	38.086	49.07

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Figures reflect FY 2016 end-of-year data.

Total Unique DTIC NIPRNET Users: 26,404 Total Unique DTIC SIPRNET Users: 5,340

Total Unique IAC (CSIAC, DSIAC, and HDIAC) Users: 97,091

Total DTIC Users: 128,835

PE 0605801KA: Defense Technical Information Center **Defense Technical Information Center**

UNCLASSIFIED

Page 13 of 17 R-1 Line #163

Appropriation/Budget Activity 0400 / 6 R-1 Program Element (Number/Name) PE 0605801KA / Defense Technical Information Center	Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Technical	Information Center		Date: May 2017
	, · · · · · · · · · · · · · · · · · · ·	PE 0605801KA I Defense Technical	- 3 (

Total scientific and technical information (STI) holdings in DTIC collections: 4.16 Million

STI added and updated to DTIC Collection: 98,397

- Total STI (NIPRNET) Added: 71,966 - Total STI (SIPRNET) Added: 828

- Total STI (NIPRNET) Updated: 25,603

STI records downloaded to Public: 40 Million-plus Records downloaded to DoD NIPRNET: 1.1 Million

IAC Customer Technical Support Requests for Analysis: 5,580

Exhibit R-2A, RDT&E Project J	ustification:	FY 2018 D	efense Tec	hnical Infor	mation Cen	ter				Date: May	2017	
Appropriation/Budget Activity 0400 / 6					_	1KA <i>I Defe</i>	t (Number/ nse Technic	,	Project (N 002 / Inforr		ne) lysis Centers	s
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
002: Information Analysis Centers	12.801	5.748	5.748	5.074	-	5.074	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 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 shared direct costs, in accordance with the IAC Reimbursable Review Board (IRRB) recommendations, with OSD-COMPT and Office of General Counsel concurrence. 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)	FY 2016	FY 2017	FY 2018	
Title: Information Analysis Centers	5.748	5.748	5.074	
FY 2016 Accomplishments: - Supported the DTIC mission to provide technical information to DoD Provided 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 Responded to 5,580 technical inquiries and provided in-depth science and technology (S&T) analysis; created and provided STI results via IAC websites; captured STI products from new/on-going analysis tasks; and supported the exchange of information among members of the operational and technical communities.				

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 15 of 17

R-1 Line #163

Volume 5 - 15

	UNCLASSIFIED			
Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Tec	chnical Information Center	Date: N	May 2017	
Appropriation/Budget Activity 0400 / 6		Project (Number/ 002 / Information A		ers
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
 Managed and supported Technical Area Tasks (TATs) ordered by and ensured alignment with Department goals/direction. Planned for the replacement of the Software, Networks, Informatio Completed award of new multi-award contract for Cyber Systems Awarded approximately 71 new TATs and 30 new CATs totaling a This is approximately a 9 percent increase in the typical annual world increased the ceiling limit for the Defense Systems TAT (DS TAT) Billion (at its previous ceiling burn rate, DS TAT would have hit its ceiling the ceiling burn rate, DS TAT would have hit its ceiling burn rate. 	on, Modeling and Simulation (SNIM) contract. TAT. pproximately \$2.2 Billion in new research and analysis wo k load for the IAC program. multi-award contract from its current \$3 Billion limit to abo	rk.		
FY 2017 Plans: - Support the DTIC mission to provide technical information to DoD Provide administrative and operational oversight of basic core condisseminate worldwide scientific and technical information (STI) in sequence and technical inquiries and provide in-depth science and technical inquiries and provide in-depth science and technical websites; capture STI products from new/on-going analysis task of the operational and technical communities Manage and support Technical Area Tasks (TATs) ordered by the ensure alignment with Department goals/direction Continue to use ACC Picatinny for processing TAT awards; engage - Increase the ceiling limit for the Homeland Defense TAT (HD TAT) about \$1.3 Billion (at its present ceiling burn rate, HD TAT will hit its - Issue Request for Proposals (RFP) and conduct proposal evaluation IAC) and the IAC Multiple Award Contract (IAC MAC)	tract activities for DoD IACs to collect, analyze, synthesize support of DoD's critical technologies and the warfighter. echnology (S&T) analysis; create and provide STI results was; and support the exchange of information among members. DoD and non-DoD customers; provide program strategy are in aggressive customer outreach to initiate processing endulti-award contract from its current \$900 Million limit to ceiling in Sept 2017, about 1.5 years before it ends).	ia ers and arly.		
FY 2018 Plans: - Support the DTIC mission to provide technical information to DoD Provide administrative and operational oversight of basic core condisseminate worldwide scientific and technical information (STI) in sequence and technical technical inquiries and provide in-depth science and technical websites; capture STI products from new/on-going analysis task of the operational and technical communities Manage and support Technical Area Tasks (TATs) ordered by the ensure alignment with Department goals/direction Continue to use ACC Picatinny for processing TAT awards; engage - Award Cyber Systems IAC contract, a \$49 Million contract, to a Small contract, and the provide technical information to DoD Provide administrative and operational information to DoD Provide administrative and operational oversight of basic core conditions.	tract activities for DoD IACs to collect, analyze, synthesize support of DoD's critical technologies and the warfighter. echnology (S&T) analysis; create and provide STI results was; and support the exchange of information among members. DoD and non-DoD customers; provide program strategy are in aggressive customer outreach to initiate processing e	ia ers and		

PE 0605801KA: *Defense Technical Information Center* Defense Technical Information Center

UNCLASSIFIED
Page 16 of 17

R-1 Line #163

Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605801KA I Defense Technical Information Center	Project (Number 002 / Information	/	ers
B. Accomplishments/Planned Programs (\$ in Millions) - Award IAC Multiple Award contract, a \$28 Billion contract, to to	FY 2016	FY 2017	FY 2018	

Accomplishments/Planned Programs Subtotals

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Figures reflect FY 2016 end-of-year data.

Number of:

- IAC web inquiries: 746,287IAC technical inquiries: 5,580
- STI documents added to IAC collection: 29,328
- STI documents generated by Technical Area Task (TAT) activities: 4,380
- Training or meeting events: 2,579 - Number of training attendees: 12,682
- Documents uploaded to DTIC's online repository: 18,199

Amount of funding:

- Provided by external customer requesting IAC technical analysis (TAT Funding): \$1.3 Billion

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Technical Information Center

- Award Homeland Defense IAC follow-on contract (value TBD) to a Small Business (4th Qtr. FY 2018).

- Provided by external customers purchasing IAC information products (Non-TAT funding): \$50,272

Customer satisfaction regarding:

- IAC products and technical inquiry support (scale of 1 to 5, 5 being best): 4.8
- IAC TATs and training (scale of 1 to 5, 5 being best): 4.9

PE 0605801KA: Defense Technical Information Center Defense Technical Information Center

UNCLASSIFIED
Page 17 of 17

R-1 Line #163

5.074

Date: May 2017

5.748

5.748



Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:

PE 0605998KA I Management HQ - Defense Technical Information Center (DTIC)

RDT&E Management Support

, ,												
COST (\$ in Millions)	Prior			FY 2018	FY 2018	FY 2018					Cost To	Total
COST (\$ III WIIIIOIIS)	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Cost
Total Program Element	0.000	0.000	4.400	4.187	-	4.187	3.987	3.787	3.836	3.886	Continuing	Continuing
001: Management HQ - Defense Technical Information Center (DTIC)	0.000	0.000	4.400	4.187	-	4.187	3.987	3.787	3.836	3.886	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program element (PE) provides funding for the Management Headquarters (HQ) element of the Defense Technical Information Center (DTIC), a DoD Field Activity to the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)/AT&L). The PE supports personnel compensation for HQ-assigned civilians, along with related administrative support costs. This second DTIC PE, established in FY 2017, is designed to track activities deemed as headquarters functions, with no operational efficiencies or enhancement to mission.

The PE supports the following HQ functions and mission essential activities critical to the success of DTIC's business operations, and mandated by law or regulation:

- Activity leadership, strategic planning, and Front Office support staff.
- -- The front office staff (6 authorizations) represents a small component of this PE. Most of the specialized functions and skill-sets described below are centralized activities within the PE, yet support the larger organization and its employees. These activities were consolidated as a means to improve efficiencies throughout DTIC, and are essential to the operation of DTIC's primary PE 0605801KA.
- -- Reductions to DTIC's HQ staffing levels continue, reducing civilian full time equivalents (FTEs) below FY 2017 levels.
- Financial Management and Comptroller. Provides integrated resource management at the Agency level to obtain, control, and execute budget and manpower authorities to support the organization's mission requirements. Develops and prepares agency budget documents and exhibits for submission to both OSD and Congress.
- -- Accounting support to DTIC's mission operations; partners with the Defense Finance and Accounting Service to present accurate financial reporting and Fund Balance with Treasury.
- -- Financial Improvement and Audit Readiness (FIAR) activities and oversight in compliance with the Department's audit goals, objectives, and milestones.
- Human Resources (HR) Liaison Support. Provides the DTIC enterprise with payroll processing and "Hire to Retire" mission support; oversees and organizes employee training, professional development, and certification programs (e.g., Acquisition, Financial Management, and IT programs).
- -- Coordinates recruitment placement and classification action for the mission areas; liaison to the Defense Finance and Accounting Service for HR servicing and the Defense Logistics Agency (DLA) for Equal Employment Opportunity (EEO) program maintenance.
- Mandatory Records Management compliance activities and administration programs.
- IT Management/Chief Information Officer (CIO). Collects, analyzes, and reports information necessary to effectively and efficiently manage enterprise IT resources; CIO functions are performed in compliance with DoD-CIO guidance, instructions and mandates.

UNCLASSIFIED
Page 1 of 3

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technical Information Center

Date: May 2017

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support

R-1 Program Element (Number/Name)

PE 0605998KA I Management HQ - Defense Technical Information Center (DTIC)

- IT Help Desk/Local Area Network (LAN). Office automation supports desktop computing customers; resolves IT-related equipment or system incidents; provides assured system and network availability, info delivery, and secure IT solutions to support current and future business and mission requirements.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	4.400	4.187	-	4.187
Current President's Budget	0.000	4.400	4.187	-	4.187
Total Adjustments	0.000	0.000	0.000	-	0.000
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-	-			

Change Summary Explanation

The change between FY 2017 and the FY 2018 Base (a net decrease of \$0.213 Million in FY 2018) includes a decrease of \$.215 Million, which reflects a reduction in the number of civilian authorizations assigned to the Management Headquarters element of DTIC.

C. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Management HQ - Defense Technical Information Center	0.000	4.400	4.187
FY 2016 Accomplishments: - N/A.			
FY 2017 Plans: - Execute the program, activities and functions as described above in Section A, Mission Description of PE 0605998KA.			
FY 2018 Plans: - Execute the program, activities and functions as described above in Section A, Mission Description of PE 0605998KA.			
Accomplishments/Planned Programs Subtotals	0.000	4.400	4.187

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

N/A

Remarks

UNCLASSIFIED
Page 2 of 3

ONOLAGON ILD							
Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Technic	al Information Center	Date : May 2017					
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support R-1 Program Element (Number/Name) PE 0605998KA I Management HQ - Defense Technical Information Center (DTIC							
E. Acquisition Strategy N/A	·						
F. Performance Metrics							
N/A							

PE 0605998KA: *Management HQ - Defense Technical Inform...*Defense Technical Information Center

UNCLASSIFIED
Page 3 of 3

R-1 Line #167

