

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Washington Headquarters Service **Date:** February 2019

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 6:</i> <i>RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0606589D8W / <i>Defense Digital Service (DDS)</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	0.000	0.000	1.000	1.000	-	1.000	1.000	1.000	1.000	1.020	Continuing	Continuing
281: <i>DDS</i>	0.000	0.000	1.000	1.000	-	1.000	1.000	1.000	1.000	1.020	Continuing	Continuing

Note

The Defense Digital Service (DDS) was launched in November 2015 and was formally chartered under DoD Directive 5105.87 in January 2017 in the Office of the Secretary of Defense (OSD) of the Department of Defense (DoD). Since that time, OSD has presented over 100 potential projects to DDS, some of which would benefit significantly from the enhanced prototyping capabilities of DDS. With appropriate funding, DDS leverage, its private sector expertise to fully support the build of a system prototype / proof-of-concept. RDT&E funding is required to support the DDS mission, which includes the ability to build software prototypes to prove out concepts for mission critical projects identified by the Department.

Ensuring that DDS has RDT&E capabilities will increase DoD's ability to leverage DDS's unique technical expertise to determine which private sector software development best practices and/or technology work best for the Department. Furthermore, the development and testing of DDS prototypes, and the insight gained, would significantly lower development costs and delivery times through traditional DoD methods.

A. Mission Description and Budget Item Justification

DDS was created to bring private sector software development best practices, talent, and technology to the Department's hardest software and technology problems. Since its launch in November 2015, DDS has project demands from OSD that have increased exponentially; some of those requests would benefit from robust prototyping / proof-of-concept capabilities by DDS teams. The former is dependent on RDT&E funding that supports the ability to acquire the most current technological solution and/or support from vendors well versed in the most advanced technological solutions.

The requested RDT&E funds will enable DDS to build prototypes and implement proof-of-concept tests for some key OSD projects. These projects will support missions in and out of theater, as well as long term goals of the department to modernize its offensive and defensive technological capabilities. DoD interest in leveraging DDS to operate in this area to solve hard and impossible problems is persistent. With appropriate funding, DDS can use the superior technical expertise of its staff, as well as ability to quickly deliver usable products to meet demand.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2020 Washington Headquarters Service	Date: February 2019
--	----------------------------

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 6:</i> <i>RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0606589D8W <i>I Defense Digital Service (DDS)</i>
--	--

B. Program Change Summary (\$ in Millions)	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020 Base</u>	<u>FY 2020 OCO</u>	<u>FY 2020 Total</u>
Previous President's Budget	0.000	1.000	1.000	-	1.000
Current President's Budget	0.000	1.000	1.000	-	1.000
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	-	-			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Washington Headquarters Service **Date:** February 2019

Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0606589D8W / <i>Defense Digital Service (DDS)</i>	Project (Number/Name) 281 / <i>DDS</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
281: <i>DDS</i>	0.000	0.000	1.000	1.000	-	1.000	1.000	1.000	1.000	1.020	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Defense Digital Service (DDS) requests \$1 million in RDT&E, DW funding in FY2020 to build prototypes / proof-of-concepts for software and hardware development efforts. DDS will leverage its expertise in private industry best practices to develop prototypes that can be scaled to production to support the overall mission of DoD. This funding will help to ensure that DDS can capitalize on its unique ability to build, and/or advise customers on how to build, prototypes and proof-of-concepts using private sector best practices.

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

	FY 2018	FY 2019	FY 2020
Title: Defense Digital Service (DDS)	-	1.000	1.000
FY 2019 Plans:			
The U.S. Department of Defense (DoD) relies on innovation to maintain our nation's ability to deter, and if necessary, defeat its adversaries, whether in conventional or unconventional environments. With a team firmly rooted in the heart of the Pentagon, Defense Digital Service (DDS) serves as a nimble unit with the ability to quickly mobilize and tackle some the DoDs toughest technological challenges. DDS's approach leverages industry best practices to efficiently navigate policy, contracts, and tech blockers to reach working and scalable solutions to hardware and software problems. The ultimate goal of the team is to support DoD in finding and implementing relevant tech solutions to hard and/or impossible problems that when solved, increase the efficiency and effectiveness of the department in carrying out its mission to defend the United States and its domestic and overseas interests. Ultimately, the purpose and goal of the team is to ensure that solutions reach the hands of end users, including warfighters, in short timelines, so that compound problems from the existing problem sets do not persist.			
FY 2020 Plans:			
The U.S. Department of Defense (DoD) needs on innovation to maintain our nation's ability to deter, and if need be, prevail in physical and technological conflict. With a team firmly rooted in the heart of the Pentagon, Defense Digital Service (DDS) serves as a nimble unit with the ability to quickly mobilize and tackle some the DoDs toughest technological challenges. DDS's approach leverages industry best practices to efficiently navigate policy, contracts, and tech blockers to reach working and scalable solutions to hardware and software problems. The ultimate goal of the team is to support DoD in finding and implementing relevant tech solutions to hard and/or impossible problems that when solved, increase the efficiency and effectiveness of the department in carrying out its mission to defend the United States and its domestic and overseas interests. Ultimately, the			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2020 Washington Headquarters Service **Date:** February 2019

Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0606589D8W / <i>Defense Digital Service (DDS)</i>	Project (Number/Name) 281 / <i>DDS</i>
--	--	--

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2018	FY 2019	FY 2020
<p>purpose and goal of the team is to ensure that solutions reach the hands of end users, including warfighters, in short timelines, so that compound problems from the existing problem sets do not persist.</p> <p><i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> DDS Research and Development is one of the Secretary of Defense's top priorities with the intent of advancing and modernizing technology, especially software systems, critical to the successful implementation of a variety of department and warfighter missions. DDS requirements are driven by challenging technical problems identified by the Secretary of Defense where technology is failing the Department of Defense mission and could impede the lethality and effectiveness of the warfighter. These problems vary in scope and complexity, but at a minimum, when resolved, have a positive impact on the warfighter's mission and capabilities. The DDS involvement may be in the development of new code, product management, advising on code development processes and releases, and hacking or re-writing existing policies or processes that are antiquated or otherwise unnecessary. The DDS engages on highly troubled projects to quickly implement fixes that ultimately reduce schedule slip, increase security, lower costs, improve user experiences, and accelerate performance. Some examples of current projects include: replacing the MEPCOM Integrated Resources System; reimagining the user interface and associated databases for the Defense Property System; devising a hard and software solution to counter Unmanned Aircraft Systems (UAS) that attack warfighters in theater; and developing a novel, modern approach to network defense. The DDS team is comprised of digital experts with backgrounds in policy, contracts, design, and engineering who collectively use their private industry and federal government experience to identify solutions to problems and rapidly devise and implement solutions.</p>			
Accomplishments/Planned Programs Subtotals	-	1.000	1.000

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u> <u>Base</u>	<u>FY 2020</u> <u>OCO</u>	<u>FY 2020</u> <u>Total</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
• O&M: BA4, PE 0901589D8W	0.246	4.569	4.549	0.000	4.549	4.544	4.542	4.541	4.635	Continuing	Continuing
• O&M (OCO): BA4, PE 0901589D8W	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Remarks
 Defense Digital Service will build, or manage the build, of prototypes and proof-of-concepts that will solve hard and impossible technological problems in DoD.

D. Acquisition Strategy

N/A

E. Performance Metrics

NA