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

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)</i>	R-1 Program Element (Number/Name) PE 0603342D8W / <i>Defense Innovation Unit (DIU)</i>
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COST (\$ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	0.000	23.498	29.198	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
434: <i>DIUx</i>	0.000	23.498	29.198	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Note

Defense Innovation Unit Experimental (DIUx) was transferred from OSD (PE 0602230D8Z) to Washington Headquarters Services (WHS) (PE 0603342D8W). In July 2018, DIUx was realigned from WHS to the Office of the Under Secretary of Defense, Research and Engineering (OUSD(R&E)). In August 2018, DIUx was re-designated the Defense Innovation Unit (DIU) to signify a permanence of the program. Effective FY2020, DIU will transfer from WHS PE 0603342D8W to OSD PE 0603342D8Z with a functional realignment across the FYDP to OUSD(R&E).

The U.S. Department of Defense (DoD) relies on innovation to maintain our nation's ability to deter, and if need be, prevail in conflict. The DIU increases the Department's access to leading-edge technologies and talent that reside in the commercial sector, with the ultimate goal of accelerating innovation into the hands of the warfighter. Working across the country, and in collaboration with allied international partners, DIU is developing new ways of doing business, growing our defense industrial base to include "non-traditional" companies that had previously not collaborated with the military, working with traditional vendors in novel ways to increase efficiency, and challenging innovators to share their knowledge and expertise in support of our nation's defense.

A. Mission Description and Budget Item Justification

Defense Innovation Unit Experimental (DIUx) was established in April 2015 and DIUx 2.0 in May 2016.

DIUx mission is to accelerate innovation in the commercially-focused technology sector to the warfighter. Initially, DIUx was managed by the Under Secretary of Defense Acquisition, Technology and Logistics (OUSD(AT&L)) when it was established in July 2015. In May 2016, DIUx was placed under the control of the Secretary of Defense and administratively managed by WHS. In July 2018, DIUx was realigned from WHS to the OUSD(R&E), In August 2018, DIUx was re-designated the Defense Innovation Unit (DIU) to signify a permanence of the program. Effective FY2020, DIU will transfer from WHS PE 0603342D8W to OSD PE 0603342D8Z with a functional realignment to OUSD(R&E).

The DIU program will fund the development of novel leading-edge technologies emerging from high-tech companies that are not traditional defense contractors. An objective of this program is to obtain innovative technological advancements developed in the commercial sector and integrated into the DoD technological ecosystem.

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B. Program Change Summary (\$ in Millions)	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Previous President's Budget	29.594	29.364	29.398	0.000	29.398
Current President's Budget	23.498	29.198	0.000	0.000	0.000
Total Adjustments	-6.096	-0.166	-29.398	0.000	-29.398
• Congressional General Reductions	-6.000	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• FFRDC (General Provisions)	-0.096	-0.166	0.000	-	0.000
• Transfer of DIU from WHS to USD(R&E)	-	-	-29.398	-	-29.398

Change Summary Explanation

Initially, DIUx was managed by the Under Secretary of Defense for Acquisition, Technology and Logistics (OUSD(AT&L)) when it was established in July 2015. In May 2016, DIUx was placed under the operational control of the Secretary of Defense and administratively managed by Washington Headquarters Services (WHS), with functional realignment of the resources across the FYDP to Washington Headquarters Services (WHS) beginning in FY 2018. In July 2018, DIUx was realigned from WHS to the Under Secretary of Defense, Research and Engineering (R&E)). In August 2018, DIUx was re-designated the Defense Innovation Unit (DIU). Effective FY 2020, DIU will transfer from WHS PE 0603342D8W to OSD PE 0603342D8Z with a functional realignment of resources across the FYDP to OUSD(R&E). In FY 2018, Congress reduced -\$6.000 million to the DIU RDT&E program.

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Exhibit R-2A, RDT&E Project Justification: PB 2020 Washington Headquarters Service										Date: March 2019		
Appropriation/Budget Activity 0400 / 3					R-1 Program Element (Number/Name) PE 0603342D8W / Defense Innovation Unit (DIU)				Project (Number/Name) 434 / DIUx			
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
434: DIUx	0.000	23.498	29.198	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

DIUx mission is to accelerate innovation to the warfighter by leveraging commercial technology innovations. Initially, this program was managed by the Under Secretary of Defense Acquisition, Technology, and Logistics (OUSD(AT&L)) with functional realignment of \$148.8 million across the FYDP to WHS beginning in FY 2018. In July 2018, DIUx was realigned from WHS to the Under Secretary of Defense, Research and Engineering (OUSD(R&E)). In August 2018, DIUx was re-designated the Defense Innovation Unit (DIU) to signify a permanence of the program. Effective FY 2020, DIU will transfer from WHS PE 0603342D8W to OSD PE 0603342D8Z with a functional realignment to OUSD(R&E). The DIU program will fund the development of novel leading-edge technologies emerging from high-tech companies that are not traditional defense contractors. An objective of this program is to obtain innovative technological advancements developed in the commercial sector and integrated into the DoD technological ecosystem. Incoming proposals will be assessed to ensure alignment with the DoD's strategic objectives to increase and strengthen our nation's security.

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

Title: Defense Innovation Unit - Experimental (DIU)

Description: The U.S. Department of Defense (DoD) relies on innovation to maintain our nation's ability to deter, and if need be, prevail in conflict. With outposts in Mountain View, California, Cambridge, Massachusetts, and Austin, Texas, the DIU serves as a bridge between those in the U.S. Military executing our nation's highest priority problems with companies operating at the cutting edge of technology. DIU continuously experiments on methods to identify, contract, prototype, and transition novel innovations with commercial entities that would not otherwise do work with the DoD. The end goal is to accelerate the adoption and utilization of cutting-edge technology for the warfighter.

FY 2019 Plans:

DIU is one of the Secretary of Defense's priorities in advancing technology, especially artificial intelligence, to help the U.S. Military become more lethal and capable of defending the nation. DIU's objective is to rapidly solve the problems of our DoD customers and deploy those solutions. Accordingly, DIU requirements are driven by DoD customers in the Services, Defense Agencies, and Combatant Commands. DoD customers come to DIU with their most challenging and most compelling technological problems. DIU works to solve the challenges and issues for the Department in areas such as Artificial Intelligence and Machine Learning, Autonomy, Human Systems, Information Technology, and Space.

FY 2020 Base Plans:

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
	23.498	29.198	0.000	0.000	0.000

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

	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total
Funds were transferred to PE 0603342D8Z. DIU continues its mission to identify and deliver cutting-edge commercial innovation to the Joint Force. DIU is rapidly prototyping and deploying innovative commercial technologies to fill critical capability gaps identified by DoD customers in the Services, Defense Agencies, and Combatant Commands. DIU works to solve challenges and issues for the Department in areas such as Artificial Intelligence and Machine Learning, Autonomy, Human Systems, Information Technology, and Space. In FY2020, DIU will add a new technology focus area of Power and Energy to develop and deliver technologies within the fields of Tactical Power, Operational Power, Directed Energy, and Hypersonics. DIU has plans to expand it's presence in Austin, TX to optimize outreach with innovative commercial sources and enhance collaboration with the newly established Army Futures Command.					
<i>FY 2020 OCO Plans:</i> N/A					
<i>FY 2019 to FY 2020 Increase/Decrease Statement:</i> The FY 2020 funds were transferred to PE 0603342D8Z. The increase of \$0.200 thousand will result in a minor re-balance of investments across the technology focus areas of Artificial Intelligence and Machine Learning, Autonomy, Human Systems, Information Technology, Space, and Power and Energy.					
Accomplishments/Planned Programs Subtotals	23.498	29.198	0.000	0.000	0.000

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

<u>Line Item</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020 Base</u>	<u>FY 2020 OCO</u>	<u>FY 2020 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>
• PE 0901583D8W: O&M	10.690	11.384	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
• PE 0901583D8Z: O&M	0.000	0.000	17.358	0.000	17.358	17.705	18.059	18.420	18.789	Continuing	Continuing

Remarks

DIU O&M mission support funding.

D. Acquisition Strategy

N/A

E. Performance Metrics

1. Speed - average days to award a prototype project at the close of a solicitation compared to the traditional acquisition system.
2. Cost Savings - estimated amount saved as a result of DIU-driven solutions.

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3. Scale - measures the success at transitioning successful projects or methodologies, and increasing the number / diversity of partnerships within the National Security Innovation Base.