Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced

PE 0603790N I NATO Research and Deve

Component Development & Prototypes (ACD&P)

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	64.267	8.320	9.867	9.099	-	9.099	10.772	10.722	10.522	10.476	Continuing	Continuing
2293: NATO Cooperative R & D	64.267	8.320	9.867	9.099	-	9.099	10.772	10.722	10.522	10.476	Continuing	Continuing

## A. Mission Description and Budget Item Justification

In accordance with Title 10 United States Code, Section 2350a, this Program Element (PE) provides funding for research and development (R&D) programs with approved allies under international agreements. These funds can only be applied to work efforts in the U.S.. The Under Secretary of Defense, Acquisition and Technology and Logistics (USD, AT&L) must approve each international agreement. The program provides funds for multiple projects under separately approved international agreements as well as funds that support the establishment of such agreements. Each international agreement is summarized in a separate Summary Statement of Intent (SSOI) that also states why the project serves to increase the defense capabilities of the U.S. The SSOI is used to obtain project approval by the Department of the Navy and the Office of the Secretary of Defense.

The North Atlantic Treaty Organization (NATO) R&D cooperative programs differ from other Research, Development, Test and Evaluation (RDT&E) programs because issuance of funding from this PE coincides with the signature of international agreements. These signatures occur throughout the fiscal year and often encounter unexpected delays during the staffing and negotiation phases of agreement processing prior to signature.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	8.320	9.867	10.548	-	10.548
Current President's Budget	8.320	9.867	9.099	-	9.099
Total Adjustments	0.000	0.000	-1.449	-	-1.449
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
<ul> <li>Program Adjustments</li> </ul>	0.000	0.000	-1.449	-	-1.449

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy										Date: May	2017	
Appropriation/Budget Activity 1319 / 4					,				Project (Number/Name) 2293 / NATO Cooperative R & D			
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
2293: NATO Cooperative R & D	64.267	8.320	9.867	9.099	-	9.099	10.772	10.722	10.522	10.476	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

### A. Mission Description and Budget Item Justification

B Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Fach)

In accordance with Title 10 U.S. Code Section 2350a, this project provides funding for research and development projects with approved allies under international agreements. These funds can only be applied to work efforts in the U.S.. The Office of Secretary of Defense must approve each international agreement. The program provides funds for multiple projects under separately approved international agreements as well as funds that support the establishment of such agreements. Each international agreement is summarized in a separate SSOI which also states why the project serves to increase the conventional defense capabilities of the U.S. The SSOI is used to obtain project approval by the Department of the Navy and the Office of the Secretary of Defense.

b. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2016	FY 2017	Base	OCO	Total
Title: NATO Cooperative R & D	8.320	9.867	9.099	0.000	9.099
Articles:	-	-	-	-	-
FY 2016 Accomplishments:					
-Continue to support approved Cooperative projects from FY2014/FY2015.					
-Plan and support approved FY2016 Cooperative projects.					
Projects include:					
-Advance Material Propeller U.S. and Australia					
-Expeditionary Modeling & Simulation Project Arrangement (AUSEMS) U.S. and Australia					
-Dynamic System Mechanics Advanced Simulation-Shallow Confined Waters (DYSMAS-SCW) U.S. and					
Germany					
-Hull Treatments U.S. and United Kingdom (UK)					
-Large Displacement Unmanned Undersea Vehicles (LD UUV) U.S. and Korea					
-Submarine Hydrodynamics U.S. and Australia					
-Allied Munitions Detection-Underwater Initiative (ALMOND-U) U.S. and Germany					
-Undersea Optical Communications (OCOMMS) U.S. and United Kingdom					
FY 2017 Plans:					
-Continue to support approved Cooperative projects from FY2015/FY2016.					
-Plan and support approved FY2017 Cooperative projects.					
Projects include:					

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FV 2018 FY 2018 FY 2018

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 4	PE 0603790N I NATO Research and Deve	2293 I NAT	O Cooperative R & D

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
-Large Displacement Unmanned Undersea Vehicles (LD UUV) U.S. and Korea -Hull Treatments U.S. and United Kingdom (UK) -Low-Band Geolocation U.S. and Australia -ALQ-227 U.S. and Australia -Electromagnetic (EM) Silencing U.S. and United Kingdom (UK) -Australia/U.S. Expeditionary Modeling & Simulation Project Arrangement (AUSEMS) U.S. and Australia -Super Quantum Small Electromagnetic Sensor (QSES) U.S. and Australia -Buoyant Cable U.S. and United Kingdom -Allied Munitions Detection-Underwater Initiative (ALMOND-U) U.S. and Germany -Autonomous Maritime Asset Protection Systems (AMAPS) U.S. and United Kingdom -Ultra Heavy Lift Amphibious Connector (UHAC) U.S. and Singapore					
FY 2018 Base Plans: -Continue to support approved Cooperative projects from FY2016/FY2017Plan and support approved FY2018 Cooperative projects.					
Projects include: -Hull Treatments U.S. and United Kingdom (UK) -Low-Band Geolocation U.S. and Australia -ALQ-227 U.S. and Australia -Electromagnetic (EM) Silencing U.S. and United Kingdom (UK) -Super Quantum Small Electromagnetic Sensor (QSES) U.S. and Australia -Direct Energy Power Systems (DEPS) U.S. and United Kingdom -Buoyant Cable U.S. and United Kingdom -Allied Munitions Detection-Underwater Initiative (ALMOND-U) U.S. and Germany -Autonomous Maritime Asset Protection Systems (AMAPS) U.S. and United Kingdom -Ultra Heavy Lift Amphibious Connector (UHAC) U.S. and Singapore					
FY 2018 OCO Plans: N/A					
Accomplishments/Planned Programs Subtotals	8.320	9.867	9.099	0.000	9.099

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

N/A

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy	Date: May 2017		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (No	umber/Name)
1319 / 4	PE 0603790N I NATO Research and Deve	2293 I NAT	O Cooperative R & D

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

Remarks

## **D. Acquisition Strategy**

N/A

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#### **E. Performance Metrics**

The intent of the North Atlantic Treaty Organization (NATO) cooperative R&D program is to provide initial funds for projects seeking allied contributions into cooperative research and development projects with the U.S. The primary metric used in the program is foreign contributions into projects supported by the program. The performance goal is met if total foreign contributions into projects exceed total NATO cooperative R&D program funds by over 100%.

This program historically does not meet established execution benchmarks. The North Atlantic Treaty Organization (NATO) R&D cooperative programs differ from other Research, Development, Test and Evaluation (RDT&E) programs because issuance of funding from this PE coincides with the signature of international agreements. These signatures occur throughout the fiscal year and often encounter unexpected delays during the staffing and negotiation phases of agreement processing prior to signature.

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