Exhibit R-2, RDT&E Budget Item Justification: FY 2018 United States Special Operations Command

Appropriation/Budget Activity R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7: Operational Systems Development

PE 0305208BB / Distributed Common Ground/Surface Systems

**Date:** May 2017

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	32.509	5.302	5.415	5.496	-	5.496	6.345	6.451	6.580	6.712	Continuing	Continuing
S400A: Distributed Common Ground/Surface Systems	32.509	5.302	5.415	5.496	-	5.496	6.345	6.451	6.580	6.712	Continuing	Continuing

## A. Mission Description and Budget Item Justification

This program element is part of the Military Intelligence Program (MIP). The Distributed Common Ground/Surface System Special Operations Forces (DCGS-SOF) is part of a family of systems providing Intelligence, Surveillance, and Reconnaissance Processing, Exploitation, Dissemination (PED), and analytical capabilities at the Joint Task Force level and below through a combination of reach back, forward support, and collaboration. The mission tailored infrastructure interconnects the warfighter and sensors to find and fix High Value Targets and provides a network-enabled, interoperable construct allowing continual, unimpeded sharing of intelligence data, information and services with SOF and between the Services, other national intelligence agencies, combatant commands and multi-national partners. It connects the SOF warfighter with the essential intelligence information and provides situation awareness information to the SOF leadership at all echelons. The four components of DCGS-SOF include the following: The Enterprise provides infrastructure and processing capability to allow for worldwide SOF intelligence information sharing. Full Motion Video PED provides (FMV) PED capabilities in garrison and deployed environments of manned and unmanned sensors. SILENT DAGGER provides Signals Intelligence exploitation capability in both garrison and deployed environments. The All Source Information Fusion (ASIF) will provide the intelligence analytical tools via a global and disconnected architecture.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	5.302	5.415	5.496	-	5.496
Current President's Budget	5.302	5.415	5.496	-	5.496
Total Adjustments	0.000	0.000	0.000	-	0.000
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
Congressional Rescissions	_	_			

Congressional Rescissions
 Congressional Adds
 Congressional Directed Transfers

## **Change Summary Explanation**

Funding:

FY 2016: None.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 United States Sp	ecial Operations Command	<b>Date:</b> May 2017
Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7: Operational Systems Development	R-1 Program Element (Number/Name) PE 0305208BB / Distributed Common Ground	nd/Surface Systems
FY 2017: None.		
FY 2018: None.		
Schedule: None.		
Technical: None.		

PE 0305208BB: *Distributed Common Ground/Surface System...* United States Special Operations Command

Exhibit R-2A, RDT&E Project Justification: FY 2018 United States Special Operations Command										Date: May 2017			
Appropriation/Budget Activity 0400 / 7	ty				R-1 Program Element (Number/Name) PE 0305208BB I Distributed Common Ground/Surface Systems				Project (Number/Name) S400A I Distributed Common Ground/ Surface Systems				
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	
S400A: Distributed Common Ground/Surface Systems	32.509	5.302	5.415	5.496	-	5.496	6.345	6.451	6.580	6.712	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

## A. Mission Description and Budget Item Justification

R Accomplishments/Planned Programs (\$ in Millions)

This program element is part of the Military Intelligence Program (MIP). The Distributed Common Ground/Surface System Special Operations Forces (DCGS-SOF) is part of a family of systems providing Intelligence, Surveillance and Reconnaissance (ISR) Processing, Exploitation, Dissemination (PED), and analytical capabilities at the Joint Task Force level and below through a combination of reach back, forward support, and collaboration. The mission tailored infrastructure interconnects the warfighter and sensors to find and fix High Value Targets and provides a network-enabled, interoperable construct allowing continual, unimpeded sharing of intelligence data, information and services with SOF and between the Services, other national intelligence agencies, combatant commands and multi-national partners. It connects the SOF warfighter with the essential intelligence information and provides situation awareness information to the SOF leadership at all echelons. The four components of DCGS-SOF include the following: The Enterprise provides infrastructure and processing capability to allow for worldwide SOF intelligence information sharing. Full Motion Video (FMV) PED provides PED capabilities in garrison and deployed environments of manned and unmanned sensors. SILENT DAGGER provides Signals Intelligence exploitation capability in both garrison and deployed environments. The All Source Information Fusion (ASIF) will provide the intelligence analytical tools via a global and disconnected architecture.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: DCGS	5.302	5.415	5.496
FY 2016 Accomplishments:  Continued to integrate emerging technologies and capability for Enterprise and ASIF to include: Advanced analytics, user interface, and disconnected operations into the DCGS-SOF baseline; Continued to refine and integrate FMV PED emerging technologies and capabilities such as: request for information tool and voice-to-text translation. Continued DCGS-SOF Limited Objective Events and exercise participation to test integration efforts. Began development of the DCGS-SOF next generation pipeline development.			
FY 2017 Plans:  Continue integration of emerging technologies and capability for Enterprise and ASIF to include: Advanced analytics, user interface, cloud technologies, and disconnected operations into the DCGS-SOF baseline. Continue to refine and integrate FMV PED emerging technologies and capabilities such as: over-watch/compound monitoring, develop analyst trip wire tools, next generation imaging, coalition interoperability and video exploitation tools, patterns of movement characterization and detection			

Exhibit R-2A, RDT&E Project Justification: FY 2018 United States Spec	Date: May 2017		
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0305208BB / Distributed Common Ground/Surface Systems	, ,	umber/Name) istributed Common Ground/ /stems

	0.0		0.0
for single mission. Continue development of the DCGS-SOF next generation pipeline. Continue Defense Intelligence Information Environment and Joint Information environment coordination.			
FY 2018 Plans: Continues integration of emerging technologies and capability for Enterprise and ASIF to include: Advanced analytics, user interface, and disconnected operations into the DCGS-SOF baseline. Continues refining and integration of FMV PED emerging technologies and capabilities such as: over-watch/compound monitoring, develop analyst trip wire tools, next generation analytics processing, upgrading imaging and video exploitation tools, patterns of movement characterization and detection for single mission. Continues DCGS-SOF Limited Objective Events and exercise participation to test integration efforts. Continues development of the interoperability with Coalition partners, Defense Intelligence Information Environment, and Joint Information Environment.			
Accomplishments/Planned Programs Subtotals	5.302	5.415	5.496

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

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

			FY 2018	FY 2018	FY 2018					Cost 10	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	<b>Complete</b>	<b>Total Cost</b>
PROC/020401INTL: Distributed	16.333	15.232	11.042	-	11.042	15.676	16.995	15.248	12.684	Continuing	Continuing
Common Ground/Surface System											

#### Remarks

## D. Acquisition Strategy

DCGS-SOF leverages SOF programs, DoD partners, National labs, and other Government Agencies to integrate commercial/government off-the-shelf systems, and other mature technologies into the Program of Record which resides within the SOF Information Enterprise and enables more agile access to (searchable, discoverable) and sharing of data and services to meet SOF-peculiar documented requirements. The technology allows for seamless integration and federation with DoD, interagency, and Coalition tactical ISR PED systems. The DCGS-SOF program office employs an agile development process with capability insertions into the development baseline for assessment and future deployment into the operational baseline. All development requirements are prioritized through the DCGS Requirements Working Group (DRWG) chaired by J2. Once approved, the requirements are evaluated and scheduled by an engineering development team. Using this methodology allows capabilities to be inserted in a fast and agile manner based on user requirements and priorities. All evolutionary technology insertions (ETIs) in the R-4 schedule are based on current program office projections. If requirements change based on the DRWG, the ETI and version capabilities identified may change.

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

N/A

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FY 2016 FY 2017

FY 2018