Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0605029A I Integrated Ground Security Surveillance Response Capability (IGSSR-C)

Date: February 2018

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	4.789	4.418	3.211	-	3.211	5.780	0.000	0.000	0.000	0.000	18.198
EQ2: IntegGrdSecSurvRespC(IGSSR-C)	-	4.789	4.418	3.211	-	3.211	5.780	0.000	0.000	0.000	0.000	18.198

Note

Integrated Ground Security, Surveillance and Response Capability (IGSSR-C) was funded in Integrated Base Defense (IBD) Program Element: 0205402A EF2 in FY 2016

A. Mission Description and Budget Item Justification

IGSSR-C: The Integrated Ground Security, Surveillance and Response Capability (IGSSR-C) is an Automated Information System (AIS) program. IGSSR-C has a requirement to provide a layered approach to integrate sensors, sensor systems and unmanned systems with automated fusion capabilities. The system will provide a Force Protection (FP) Common Operational Picture (COP) capability for CONUS fixed, OCONUS semi-fixed or expeditionary elements in all Operating Environments (OE).

This capability will enable rapid decision analysis, speed the response process as well as increase information dissemination horizontally and vertically along the chain of command and with outside supporting organizations. IGSSR-C is a software centric fusion engine that connects legacy and emerging FP systems, legacy Chemical, Biological, Radiological, and Nuclear (CBRN), unmanned systems, biometric identification and forensic data systems. The desired end state is to achieve interoperability and COP with current and emerging FP systems used by Joint Forces, Department of Defense (DoD) agencies and multi-national forces.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	4.980	4.418	1.324	-	1.324
Current President's Budget	4.789	4.418	3.211	-	3.211
Total Adjustments	-0.191	0.000	1.887	-	1.887
 Congressional General Reductions 	-0.002	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.189	-			
Adjustments to Budget Years	-	-	1.887	-	1.887

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xhibit R-2, RDT&E Budget Item Justification: PB 2019 Army		Date: February 2018		
Appropriation/Budget Activity 1040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0605029A / Integrated Ground Security Surveillance	e Response Capability (IGSSR-C		
Change Summary Explanation FY 2019 increase of \$1.887 million is due to an adjustment required	to align funding with planned acquisition strategy.			

PE 0605029A: Integrated Ground Security Surveillance ... Army

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2019 A	Army							Date: Febr	ruary 2018	
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605029A I Integrated Ground Security Surveillance Response Capability (IGSSR-C) Project (Number/Name) EQ2 I IntegGrdSecSurvRespC(IGSSR-C)							SSR-C)
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
EQ2: IntegGrdSecSurvRespC(IGSSR-C)	-	4.789	4.418	3.211	-	3.211	5.780	0.000	0.000	0.000	0.000	18.198
Quantity of RDT&E Articles	-	-	-	-	-	_	-	-	-	-		

Note

Integrated Ground Security, Surveillance and Response Capability (IGSSR-C) was funded in Integrated Base Defense (IBD) Program Element: 0205402A EF2 in FY 2016.

A. Mission Description and Budget Item Justification

IGSSR-C: The Integrated Ground Security, Surveillance and Response Capability (IGSSR-C) is an Automated Information System (AIS) program. IGSSR-C has a requirement to provide a layered approach to integrate sensors, sensor systems and unmanned systems with automated fusion capabilities. The system will provide a Force Protection (FP) Common Operational Picture (COP) capability for CONUS fixed, OCONUS semi-fixed or expeditionary elements in all Operating Environments (OE).

This capability will enable rapid decision analysis, speed the response process as well as increase information dissemination horizontally and vertically along the chain of command and with outside supporting organizations. IGSSR-C is a software centric fusion engine that connects legacy and emerging FP systems, legacy Chemical, Biological, Radiological, and Nuclear (CBRN), unmanned systems, biometric identification and forensic data systems. The desired end state is to achieve interoperability and COP with current and emerging FP systems used by Joint Forces, Department of Defense (DoD) agencies and multi-national forces.

FY 2019 Base Funding in the amount of \$3.211 million supports completion of Integrated Ground Security, Surveillance and Response -Capability (IGSSR-C) software baseline. This funding also supports Critical Design Review (CDR), Developmental and Limited User Test (LUT) events, and modeling and simulation.

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2019	FY 2019	FY 2019
	FY 2017	FY 2018	Base	oco	Total
Title: IGSSR-C Design and Development	4.789	4.418	3.211	-	3.211
Description: Completes IGSSR-C design efforts and initiates software integration activities.					
FY 2018 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army			Date: Feb	ruary 2018	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605029A I Integrated Ground Security Surveillance Response Capability (IGSSR-C)	EQ2 I Inte	Number/Nar egGrdSecSu	,	GSSR-C)
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2019	FY 2019	FY 2019

B. Accomplishments/Planned Programs (\$ in Millions)			FY 2019	FY 2019	FY 2019
	FY 2017	FY 2018	Base	oco	Total
Continue development and implementation of all technical requirements. Completes Preliminary Design Review (PDR) and supports participation in Technical Support Operational Analysis (TSOA) events. Provides for Program Management Support (PMO) support and modeling and simulation efforts.					
FY 2019 Base Plans: FY 2019 Plans: Complete development and implementation of all technical requirements. Complete Critical Design Review (CDR) and supports Developmental Testing and Limited User Testing (LUT). Provides support to modeling and simulation efforts.					
FY 2018 to FY 2019 Increase/Decrease Statement: Change in funding level from FY 2018 to FY 2019 is due to completion of architecture framework and realignment of government Program Management Office (PMO) support funds from RDT&E to Operations and Maintenance Army (OMA).					
Accomplishments/Planned Programs Subtotals	4.789	4.418	3.211	-	3.211

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

			FY 2019	FY 2019	FY 2019					Cost To	
<u>Line Item</u>	FY 2017	FY 2018	Base	<u>000</u>	<u>Total</u>	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total Cost
• M90106: <i>Base</i>	26.572	3.726	0.000	39.200	39.200	-	0.727	0.705	2.362	0.000	73.292

Defense Systems (BDS)

Remarks

D. Acquisition Strategy

The Integrated Ground Security, Surveillance and Response Capability (IGSSR-C) provides a layered approach to integrate sensors, sensor systems and unmanned systems. The IGSSR-C Capability Design Document (CDD) was approved September 2013. IGSSR-C is made up of a suite of software that achieves integration, fusion and interoperability in support of the Army Acquisition Executive's Common Operating Environment (COE) Command Post Compute Environment (CPCE) and Sensor CE efforts.

In FY 2014, the Department of Defense (DoD) Physical Security Enterprise and Analysis Group (PSEAG) provided funds to conduct pre-milestone B activities. IGSSR-C received an approved Materiel Development Decision (MDD) from the Milestone Decision Authority (MDA) on 4 December 2015. The acquisition strategy for IGSSR-C was approved on 5 December 2016 by the MDA, which approved plans to leverage a Night Vision and Electronic Sensors Directorate (NVESD), Fort Belvoir, Virginia

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605029A I Integrated Ground Security Surveillance Response Capability (IGSSR-C)	Project (Number/Name) EQ2 I IntegGrdSecSurvRespC(IGSSR-C)
delivery order to develop, integrate and test the Initial Capability (IC). Mileston Expeditionary (GBOSS-E) and Tactical Security System (TSS) in order to gain		ased Operational Surveillance System -
E. Performance Metrics		
N/A		

PE 0605029A: Integrated Ground Security Surveillance ... Army

Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2019 Arm	y			,					Date:	February	2018		
Appropriation/Budge 2040 / 5	t Activity	,											Project (Number/Name) EQ2			
Management Service	∍s (\$ in M	illions)		FY 2	2017	FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value o Contrac	
IGSSR-C Project Management	MIPR	PM FPS : Fort Belvoir, VA	-	0.151	Dec 2016	0.309		-		-		-	0.000	0.460	-	
IGSSR-C Independent Software Assessment	MIPR	Carnegie Mellon University Software Engineering Institute: Pittsburgh, PA	-	-		0.340		-		-		-	Continuing	Continuing	Continuir	
		Subtotal	-	0.151		0.649		-		-		-	Continuing	Continuing	N/	
Product Developmen	nt (\$ in M	illions)		FY 2	2017	FY 2	018	FY 2 Ba			2019 CO	FY 2019 Total				
	Contract Method	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac	
Cost Category Item	∖ & IVpe	ACTIVITY & LOCATION	i cai s													
Cost Category Item IGSSR-C Design	& Type C/CPFF	NVESD/MTEQ : Ft. Belvoir	-	1.873	Oct 2017	2.601		1.959	Feb 2019	-		1.959	Continuing	Continuing	Continuir	
		NVESD/MTEQ : Ft.	-		Oct 2017 Oct 2017			1.959	Feb 2019	-		1.959		Continuing Continuing		
IGSSR-C Design	C/CPFF	NVESD/MTEQ : Ft. Belvoir NVESD/MTEQ : Ft.	- -			2.601		1.959 - 1.959	Feb 2019			-	Continuing		Continuir	
IGSSR-C Design IGSSR-C Prototypes	C/CPFF	NVESD/MTEQ : Ft. Belvoir NVESD/MTEQ : Ft. Belvoir	- - -	1.865	Oct 2017	2.601	018	1.959		- - FY:	2019 CO	-	Continuing	Continuing	Continuir	
IGSSR-C Design IGSSR-C Prototypes	C/CPFF	NVESD/MTEQ : Ft. Belvoir NVESD/MTEQ : Ft. Belvoir	Prior Years	1.865	Oct 2017	2.601	018 Award Date	1.959	019	- - FY:		1.959 FY 2019	Continuing	Continuing	Continuir N/ Target Value o	
IGSSR-C Design IGSSR-C Prototypes Support (\$ in Million	C/CPFF C/CPFF s) Contract Method	NVESD/MTEQ : Ft. Belvoir NVESD/MTEQ : Ft. Belvoir Subtotal Performing	Prior	1.865 3.738 FY 2	Oct 2017	2.601 - 2.601	Award	1.959 FY 2 Ba	2019 se	- - FY 2	CO Award	1.959 FY 2019 Total Cost	Continuing Continuing Cost To Complete	Continuing Continuing Total	Continuir N/A Target Value of	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	lumber/Name)
2040 / 5	PE 0605029A I Integrated Ground Security	EQ2 / Integ	gGrdSecSurvRespC(IGSSR-C)
	Surveillance Response Capability (IGSSR-		
	(C)		

Test and Evaluation	(\$ in Milli	ons)		FY 2	2017	FY 2	2018	1	2019 ase		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
IGSSR-C Test and Evaluation	MIPR	ATEC : Aberdeen Proving Ground, MD	-	0.395	Dec 2016	0.230		0.746	Feb 2019	-		0.746	Continuing	Continuing	Continuing
IGSSR-C Modeling and Simulation	MIPR	Night Vision and Electronic Sensors Directorate : Ft. Belvoir, VA	-	-		0.745		0.350	Feb 2019	-		0.350	Continuing	Continuing	Continuin
		Subtotal	-	0.395		0.975		1.096		-		1.096	Continuing	Continuing	N/A
			Prior Years	FY 2	2017	FY 2	2018	1 1	2019 ase		2019 CO	FY 2019 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	-	4.789		4.418		3.211		-		3.211	Continuing	Continuing	N/A

<u>Remarks</u>

Date: February 2018 Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

2040 / 5 PE 0605029A I Integrated Ground Security

Surveillance Response Capability (IGSSR-

EQ2 I IntegGrdSecSurvRespC(IGSSR-C)

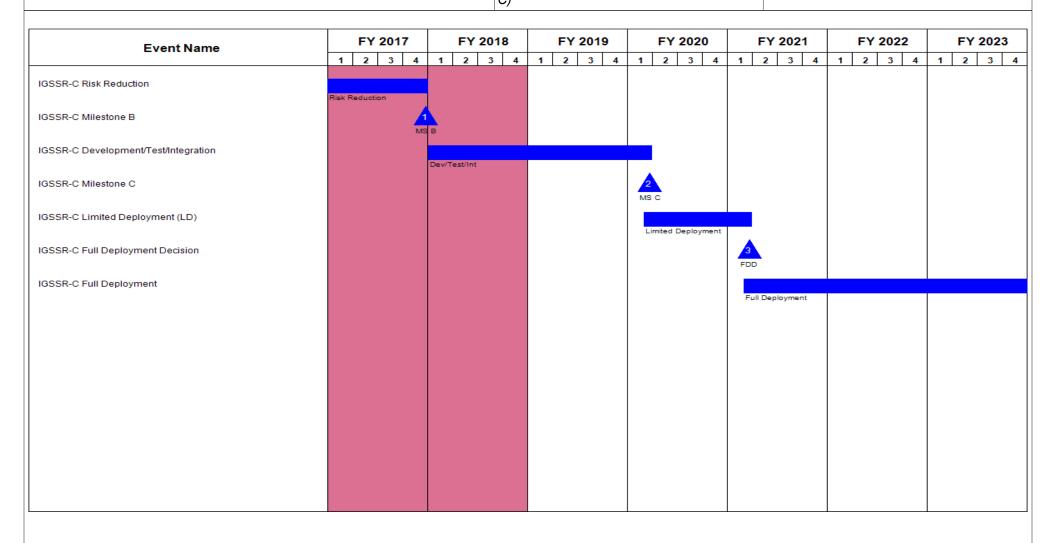


Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)	
2040 / 5	PE 0605029A I Integrated Ground Security	EQ2 / Integ	gGrdSecSurvRespC(IGSSR-C)
	Surveillance Response Capability (IGSSR-		
	(C)		

Schedule Details

	Start		End	
Events	Quarter	Year	Quarter	Year
IGSSR-C Risk Reduction	4	2015	4	2017
IGSSR-C Milestone B	4	2017	4	2017
IGSSR-C Development/Test/Integration	1	2018	1	2020
IGSSR-C Milestone C	1	2020	1	2020
IGSSR-C Limited Deployment (LD)	1	2020	1	2021
IGSSR-C Full Deployment Decision	1	2021	1	2021
IGSSR-C Full Deployment	1	2021	1	2025