Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0305240F I Support to DCGS Enterprise

Date: March 2014

Operational Systems Development

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	22.454	19.309	20.218	-	20.218	28.623	28.166	26.748	27.256	Continuing	Continuing
674826: Common Imagery Ground / Surface Systems	-	12.898	12.040	11.560	-	11.560	16.255	16.006	15.196	15.485	Continuing	Continuing
675265: Common Imagery Processor (CIP)	-	9.556	7.269	8.658	-	8.658	12.368	12.160	11.552	11.771	Continuing	Continuing

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This Program Element contains Distributed Common Ground/Surface System (DCGS) Family of Systems interoperability efforts for which the AF is lead service. The DCGS Family of Systems, including AF DCGS, was directed to migrate to a net-centric DoD Intelligence, Surveillance and Reconnaissance (ISR) enterprise enabling the Services to operate and share intelligence products more effectively in a joint environment. All Services must pursue a common path based on a set of common enterprise services consistent with the Department's net-centric vision while maintaining flexibility to support the full range of warfighter missions. Specifically, DoD charged the Air Force to lead the development, upgrade, integration, and test of common DCGS Integration Backbone (DIB) enterprise services. The DIB is a set of enterprise standards and services that enable interoperability and component reuse. All the military services are mandated to incorporate DIB interoperability standards and commit to DIB architecture as the migration path to common DCGS enterprise services.

The Distributed Common Ground Systems-Imagery (DCGS-I) Testbed is an integration and test environment, used by the Services and Agency DCGS program offices to conduct integration of DCGS components and test interoperability interfaces with new sensors, applications, and net-centric operations. This testbed also supports the integration and testing of DoD DCGS components prior to introduction into the operational environment. Periodic upgrades ensure the Testbed stays current with DCGS standards and architecture.

Support to OUSD(I), AF DCGS, and NATO interoperability efforts is also provided through this program element. This includes development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

The Common Imagery Processor effort develops a common imagery sensor processing capability within the DCGS architecture. The imagery processor accepts airborne imagery data, processes it into an exploitable format, and provides it to other elements within the weapon system and the DCGS Enterprise. Current efforts are transitioning the legacy imagery processor from a hardware/software capability to a virtual software capability, thereby improving enterprise processing capabilities. Efforts continue to keep the capability on track to handle the current sensors. Activities also include testing, development, and demonstrations integrating updated and new/emerging sensors into DCGS.

Activities also include studies and analysis to support both current program planning and execution and future program planning.

PE 0305240F: Support to DCGS Enterprise

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

Date: March 2014

Appropriation/Budget Activity

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

Operational Systems Development

R-1 Program Element (Number/Name)

PE 0305240F / Support to DCGS Enterprise

This program is in Budget Activity 7, Operational System Development because this budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	24.500	23.016	25.350	-	25.350
Current President's Budget	22.454	19.309	20.218	-	20.218
Total Adjustments	-2.046	-3.707	-5.132	-	-5.132
 Congressional General Reductions 	-0.033	-			
 Congressional Directed Reductions 	-	-3.707			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-2.013	-	-5.132	-	-5.132

Change Summary Explanation

In FY13, \$2.013M for sequestration.

In FY14, \$3.707M for Congressional Directed Reduction.

In FY15, \$5.132M for higher Air Force priorities.

PE 0305240F: Support to DCGS Enterprise

Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force							Date: March 2014					
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305240F / Support to DCGS Enterprise 674826 / Common Imagery Ground Surface Systems				nd /			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
674826: Common Imagery Ground / Surface Systems	-	12.898	12.040	11.560	-	11.560	16.255	16.006	15.196	15.485	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	_	-	-	-	-	-	-		

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

DoD charged the AF with developing, upgrading and managing the Distributed Common Ground/Surface System (DCGS) Integration Backbone (DIB) for all the Services to provide common DCGS enterprise services and interoperability at the data level. The DIB is a set of enterprise standards and services that enable interoperability and component reuse. Using the DIB, the Air Force Distributed Common Ground System (AF DCGS) modernization will transform AF DCGS from its existing proprietary system to a net-centric service oriented architecture.

The DCGS Family of Systems, including AF DCGS, was directed to migrate to a net-centric DoD Intelligence, Surveillance, and Reconnaissance (ISR) enterprise enabling the Services to operate and share intelligence products more effectively in a joint environment. All Services must pursue a common path based on common enterprise services consistent with the Department's net-centric vision, while maintaining flexibility to support the full range of warfighter missions. Also, all Services are mandated to incorporate DIB interoperability standards and commit to DIB architecture as the migration path to common DCGS enterprise services.

The Distributed Common Ground Systems-Imagery (DCGS-I) Testbed is an integration and test environment, used by the Services and Agency DCGS program offices to conduct integration of DCGS components and test interoperability interfaces with new sensors, applications, and net centric operations. This testbed also supports the integration and testing of DoD DCGS components prior to introduction into the operational environment. Periodic upgrades ensure the Testbed stays current with DCGS standards and architecture.

The AF-sponsored DIB System Program Office also participates in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Distributed Common Ground / Surface System (DCGS) Integration Backbone	8.591	8.488	7.944
Description: Upgrade, improve and manage the DCGS Integration Backbone (DIB).			
FY 2013 Accomplishments: Continued to upgrade, improve and manage the DIB.			
FY 2014 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force		Date: I	March 2014		
Appropriation/Budget Activity 3600 / 7	• •	Project (Number/Name) 374826 I Common Imagery Ground / Surface Systems			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014	FY 2015	
Continuing to upgrade, improve and manage the DIB.					
FY 2015 Plans: Will continue to upgrade, improve and manage the DIB.					
Title: Distributed Common Ground / Surface System-Imagery (DCGS-I)	Testbed	1.907	1.651	1.700	
Description: Continue DCGS-I Testbed development and upgrades. Contemprise tests.	ontinue to use the Testbed to conduct DIB and DCG	S			
FY 2013 Accomplishments: Continued DCGS-I Testbed development and upgrades. Continued to utests.	se the Testbed to conduct DIB and DCGS enterprise	e			
FY 2014 Plans: Continuing DCGS-I Testbed development and upgrades. Continuing to tests.	use the Testbed to conduct DIB and DCGS enterpris	se			
FY 2015 Plans: Will continue to develop and upgrade the DCGS-I Testbed and use for D	DIB and DCGS enterprise tests.				
Title: Support to Distributed Common Ground / Surface System (DCGS)) Enterprise	2.400	1.901	1.916	
Description: Provide support to OUSD(I), AF DCGS and NATO Interoperation	erability Enterprise efforts.				
FY 2013 Accomplishments: Provided support to OUSD(I), AF DCGS and NATO Interoperability Ente	erprise efforts.				
FY 2014 Plans: Continuing to provide support to OUSD(I), AF DCGS and NATO Interope	erability Enterprise efforts.				
FY 2015 Plans: Will continue to provide support to OUSD(I), AF DCGS and NATO Interc	pperability Enterprise efforts.				
	Accomplishments/Planned Programs Sub	totals 12.898	12.040	11.56	

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

N/A

Remarks

PE 0305240F: Support to DCGS Enterprise

Air Force

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force			Date: March 2014		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	ject (Number/Name)		
3600 / 7	PE 0305240F / Support to DCGS Enterprise	674826 / C	Common Imagery Ground /		
		Surface Sy	/stems		
D. Acquisition Stratogy	·				

D. Acquisition Strategy

The Air Force uses an evolutionary acquisition approach with version releases and periodic upgrades to develop, field, and upgrade the system and structure contracts for the improved capabilities through full and open competition to the maximum extent possible.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are conti	ributing to Air
Force performance goals and most importantly, how they contribute to our mission.	

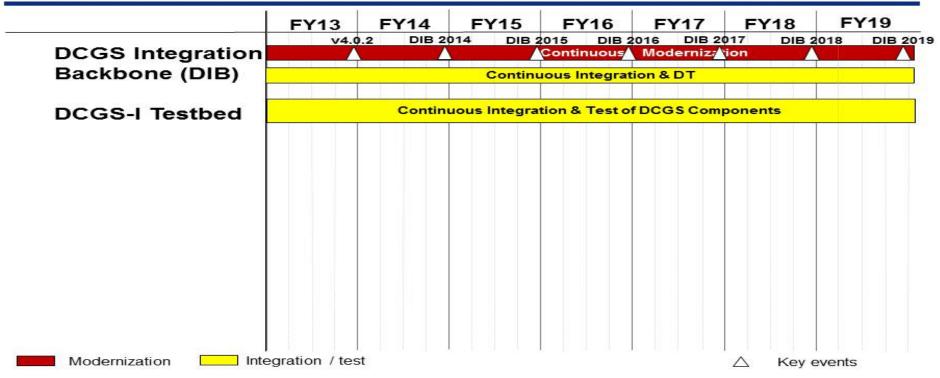
PE 0305240F: Support to DCGS Enterprise Air Force

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Exhibit R-4. RDT&E Schedule Profile: PB 2015 Air Force Date: March 2014 R-1 Program Element (Number/Name) Project (Number/Name) Appropriation/Budget Activity PE 0305240F / Support to DCGS Enterprise 674826 / Common Imagery Ground / 3600 / 7 Surface Systems



Support to DCGS Enterprise Schedule



PE 0305240F: Support to DCGS Enterprise

Air Force

Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force							Date: March 2014					
Appropriation/Budget Activity 3600 / 7					R-1 Program Element (Number/Name) PE 0305240F / Support to DCGS Enterprise Project (Number/Name) 675265 / Common Imagery Proce				ssor (CIP)			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 FY 2015 Cost To Cost To Complete FY 2016 FY 2017 FY 2018 FY 2019 Complete Complete				Total Cost			
675265: Common Imagery Processor (CIP)	-	9.556	7.269	8.658	-	8.658	12.368	12.160	11.552	11.771	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

^{*}The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Common Imagery Processor effort develops a common imagery sensor processing capability within the DCGS architecture. The imagery processor accepts airborne imagery data, processes it into an exploitable format, and provides it to other elements within the weapon system and/or the DCGS Enterprise. Current efforts are transitioning the legacy imagery processor from a hardware/software capability to a virtual software capability, thereby improving enterprise processing capabilities. Efforts continue to keep the capability on track to handle the current sensors. Activities also include testing, development, and demonstrations integrating updated and new/emerging sensors into DCGS.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
Title: Imagery Processor	9.556	7.269	8.658
Description: Continue to develop the imagery processor to keep pace with growing sensor baseline.			
FY 2013 Accomplishments: Continued development of imagery processing capability to keep pace with growing sensor baseline.			
FY 2014 Plans: Continuing development of imagery processing capability to keep pace with growing sensor baseline.			
FY 2015 Plans: Will continue to develop imagery processing capability to keep pace with growing sensor baseline.			
Accomplishments/Planned Programs Subtotals	9.556	7.269	8.658

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

			FY 2015	FY 2015	FY 2015					Cost To	
<u>Line Item</u>	FY 2013	FY 2014	<u>Base</u>	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
• RDTE: BA07: 0305208F:	43.580	6.321	27.265	-	27.265	24.702	23.177	23.630	24.081	Continuing	Continuing

Distributed Common Ground System

Ground Syste

Remarks

PE 0305240F: Support to DCGS Enterprise Air Force

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Air Force			Date: March 2014
The state of the s	, ,	- , (umber/Name)
3600 / 7	PE 0305240F I Support to DCGS Enterprise	675265 / C	Common Imagery Processor (CIP)

D. Acquisition Strategy

For imagery processing the Air Force uses an evolutionary acquisition approach with blocks (increments) and spirals to develop, field, and upgrade the system and structure contracts for the improved capabilities through full and open competition to the maximum extent possible.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Ai
Force performance goals and most importantly, how they contribute to our mission.

PE 0305240F: Support to DCGS Enterprise

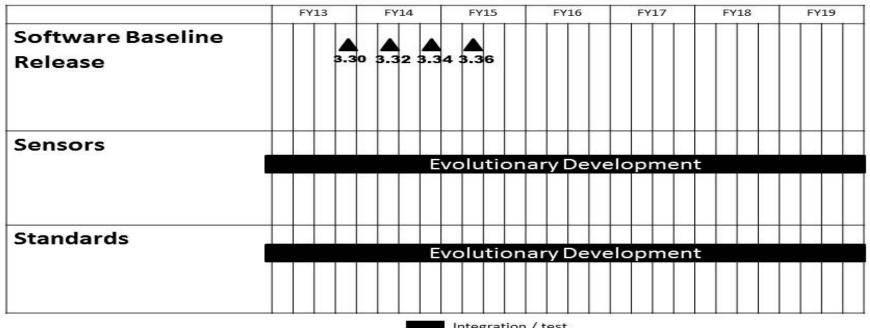
Air Force

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Air Force

Appropriation/Budget Activity
3600 / 7

R-1 Program Element (Number/Name)
PE 0305240F / Support to DCGS Enterprise
PE 0305240F / Support to DCGS Enterprise
Project (Number/Name)
675265 / Common Imagery Processor (CIP)

Imagery Processing Schedule



Integration / test

Key events

PE 0305240F: Support to DCGS Enterprise

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