Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*				R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	75.251	82.404	93.398	0.000	93.398	55.147	45.523	46.081	46.759	Continuing	Continuing
674826: *Common Imagery Ground / Surface Systems*	63.953	70.152	82.509	0.000	82.509	44.263	34.735	35.130	35.647	Continuing	Continuing
675265: *Common Imagery Processor (CIP)*	11.298	12.252	10.889	0.000	10.889	10.884	10.788	10.951	11.112	0.000	0.000

A. Mission Description and Budget Item Justification

The DoD Distributed Common Ground/Surface System (DCGS) Program is a cooperative effort between the Services and National Agencies to provide world-wide ground/surface systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance sensors/platforms and commercial sources. The DCGS program is developing a family of systems capable of supporting all levels of conflict, interoperable with reconnaissance platforms and sensors, and integrated into the Joint Command, Control, Communication, Computer, and Intelligence (C4I) environment. The program integrates architectures and standards from DCGS Imagery architecture for Imagery Intelligence (IMINT), Joint Airborne SIGINT Architecture (JASA) for Signals Intelligence (SIGINT), and Joint Airborne Measurement and Signature Intelligence (MASINT) Architecture (JAMA) for MASINT, and all-source analyses to Combat Air Forces and Combatant Commanders. The Air Force has been charged by DoD with developing, upgrading and managing the DCGS Integration Backbone (DIB) for all the Services to provide common DCGS enterprise services and interoperability at the data level.

AF DCGS provides the Air Force ground systems capable of tasking intelligence sensors, and receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms and commercial sources. AF DCGS is a 'system of systems' interconnected by a robust communications structure to provide data sharing capabilities between intelligence collectors, exploiters, producers, disseminators, and users. AF DCGS has five core locations: two CONUS based and three OCONUS. Several other AF DCGS systems are distributed among Air Force operational units at Numbered Air Force and Air National Guard locations, to support Joint Task Force commanders and Air and Space Operations Centers (AOC). The CONUS based systems are capable of reach back operations via data link and satellite relay connectivity to forward operating sensors.

AF DCGS provides critical data and significant support for Time Sensitive Targeting (TST) operations. This support will be enhanced with integration of software tools and data interfaces to the AOC, system changes required for new/upgraded sensors and by the transformation of AF DCGS to a net-centric, service oriented architecture construct. By converting from a stovepipe system of systems to a web-based integrated net centric Intelligence, Surveillance, and Reconnaissance (ISR) management capability, AF DCGS will provide the Joint Forces Air Component Commander (JFACC) the capability to:
1) Dynamically visualize and command ISR assets and the information in the AOC

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*

2) Quickly and effectively synchronize AF DCGS ISR operations, collection capabilities, and information with the AOC's combat objectives to improve the TST process and reduce timelines.

Using the DIB, AF DCGS modernization is transforming AF DCGS from a proprietary system to a net centric service oriented architecture. This modernization effort, implemented in Block 10.2, will deliver a net centric DCGS capability for the Air Force. Block 10.2 spirals the necessary technologies and tools into its architecture to provide increased capabilities and meet emerging and urgent user operational needs. These spirals will also integrate commercial and government off-the-shelf fact-of-life version upgrades to provide current technologies and achieve necessary application and services. The next series of upgrades will meet the operational need to integrate new and/or improved sensor capabilities and enhance interoperability by migrating to a service oriented architecture and improving data sharing ability in compliance with DoD direction.

AF DCGS will continue to modernize its network management and interface capabilities by upgrading and migrating its network to a standardized interface configuration which is easy to expand and adapt to new technologies while growing capacity requirements. Efforts will also focus on network management systems and the ability to manage critical bandwidths to meet operational surges and distributed operational requirements.

The Common Imagery Processor (CIP) is the common sensor processing element within the DCGS IMINT architecture. The function of the CIP is to accept airborne imagery data, process it into an exploitable image, and output the image to other elements within DCGS. Efforts continue to upgrade the CIP baseline to maintain currency with upgraded/new sensors.

The DCGS-I Testbed is a mobile test environment used by Service and Combat Support Agency program offices to 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. Upgrades to the DCGS-I Testbed will ensure it maintains currency with existing interface standards.

AF DCGS participates in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

AF DCGS is categorized as Budget Activity 7 because it provides for development of technologies and capabilities in support of operational system development.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	105.272	82.404	0.000	0.000	0.000
Current President's Budget	75.251	82.404	93.398	0.000	93.398
Total Adjustments	-30.021	0.000	93.398	0.000	93.398
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-30.021	0.000	93.398	0.000	93.398

Change Summary Explanation

- Funding in FY2009 taken for higher AF priorities.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
674826: *Common Imagery Ground / Surface Systems*	63.953	70.152	82.509	0.000	82.509	44.263	34.735	35.130	35.647	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The DoD Distributed Common Ground/Surface System (DCGS) Program is a cooperative effort between the Services and National Agencies to provide world-wide ground/surface systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance sensors/platforms and commercial sources. The DCGS program is developing a family of systems capable of supporting all levels of conflict, interoperable with reconnaissance platforms and sensors, and integrated into the Joint Command, Control, Communication, Computer, and Intelligence (C4I) environment. The program integrates architectures and standards from DCGS Imagery architecture for Imagery Intelligence (IMINT), Joint Airborne SIGINT Architecture (JASA) for Signals Intelligence (SIGINT), and Joint Airborne Measurement and Signature Intelligence (MASINT) Architecture (JAMA) for MASINT, and all-source analyses to Combat Air Forces and Combatant Commanders. The Air Force has been charged by DoD with developing, upgrading and managing the DCGS Integration Backbone (DIB) for all the Services to provide common DCGS enterprise services and interoperability at the data level.

DCGS provides the Air Force ground systems capable of tasking intelligence sensors, and receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms and commercial sources. AF DCGS is a 'system of systems' interconnected by a robust communications structure to provide data sharing capabilities between intelligence collectors, exploiters, producers, disseminators, and users. AF DCGS has five core locations: two CONUS based and three OCONUS. Several other AF DCGS systems are distributed among Air Force operational units at Numbered Air Force and Air National Guard locations, to support Joint Task Force commanders and Air Operations Centers (AOC). The CONUS based systems are capable of reach back operations via data link relay and satellite relay connectivity to forward operating sensors.

AF DCGS provides critical data and significant support for Time Sensitive Targeting (TST) operations. This support will be enhanced with the integration of software tools and data interfaces to the AOC system changes required for new/upgraded sensors and by the transformation of AF DCGS to a net centric, service oriented architecture construct. By converting from a stovepipe system of systems to a web based integrated net centric Intelligence, Surveillance, and Reconnaissance (ISR) management capability, AF DCGS will provide the Joint Forces Air Component Commander (JFACC) the capability to:
1) Dynamically visualize and command ISR assets and the information in the AOC
2) Quickly and effectively synchronize AF DCGS ISR operations, collection capabilities, and information with the AOC's combat objectives to improve the TST process and reduce timelines.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*	**PROJECT** 674826: *Common Imagery Ground / Surface Systems*

Using the DIB, AF DCGS modernization will transform AF DCGS from its existing proprietary system to a net centric service oriented architecture. This modernization effort, implemented in Block 10.2, will deliver a net centric DCGS capability for the Air Force. Block 10.2 spirals the necessary technologies and tools into its architecture to provide increased capabilities and meet emerging and urgent user operational needs. These spirals will also integrate commercial and government fact-of-life version upgrades to provide current technologies and achieve necessary application and services. The next series of upgrades will meet the operational need to integrate new and/or improved sensor capabilities and enhance interoperability by migrating to a service oriented architecture and improving data sharing ability in compliance with DoD direction.

AF DCGS will continue to modernize its network management and interface capabilities by upgrading and migrating its network to a standardized interface configuration which is easy to expand and adapt to new technologies while growing capacity requirements. Efforts will also focus on network management systems and the ability to manage critical bandwidths to meet operational surges and distributed ops requirements.

The DCGS-I Testbed is a mobile test environment, which is used by Service and Agency program offices to 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. Upgrades to the DCGS-I Testbed will ensure it maintains currency with existing interface standards.

AF DCGS participates in the development, testing, and implementation of international standards (to include NATO standardization agreements) to ensure joint, allied, and coalition interoperability.

AF DCGS is categorized as Budget Activity 7 because it provides for development of technologies and capabilities in support of operational system development.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Develop and integrate Block 10.2 into AF DCGS	37.255	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: In FY 2009: Completed Block 10.2 upgrades...provided required tools for AF DCGS support to the JTF Commander and below.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: In FY 2010: N/A *FY 2011 Base Plans:* In FY 2011: N/A *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
MAJOR THRUST: Integrate new/improved sensors and increase capacity and data availability. *FY 2009 Accomplishments:* In FY 2009: Continued development efforts to meet operational need to integrate new and improved sensors, increase capacity and data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct. *FY 2010 Plans:* In FY 2010: Continue development efforts to meet operational need to integrate new and improved sensors, increase capacity and data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct. *FY 2011 Base Plans:* In FY 2011: Continue development efforts to meet operational need to integrate new and improved sensors, increase capacity and data availability, and comply with DoD direction to improve interoperability through migration to a service oriented architecture construct. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A	5.974	50.208	63.351	0.000	63.351
MAJOR THRUST: Upgrade, improve and manage the DCGS Integration Backbone (DIB).	7.639	7.800	7.100	0.000	7.100

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009: Upgraded the DIB. *FY 2010 Plans:* In FY 2010: Upgrade, improve and manage the DIB. *FY 2011 Base Plans:* In FY 2011: Upgrade, improve and manage the DIB. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
MAJOR THRUST: Continue upgrade of AF DCGS communications network. *FY 2009 Accomplishments:* In FY 2009: Continued upgrade of AF DCGS communications network. *FY 2010 Plans:* In FY 2010: Continue to upgrade of AF DCGS communications network. *FY 2011 Base Plans:* In FY 2011: Continue to upgrade of AF DCGS communications network. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A	3.807	2.400	2.500	0.000	2.500
MAJOR THRUST: Continue to evolve DCGS architectures and standards and manage DCGS IPT effort for USD(I)	2.421	2.888	2.644	0.000	2.644

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: In FY 2009: Continued evolving DCGS architectures and standards for commonality and interoperability across intelligence disciplines to include NATO interoperability and management of DCGS IPT effort for USD(I) *FY 2010 Plans:* In FY 2010: Continue evolving DCGS architectures and standards for commonality and interoperability across intelligence disciplines to include NATO interoperability and management of DCGS IPT effort for USD(I) *FY 2011 Base Plans:* In FY 2011: Continue evolving DCGS architectures and standards for commonality and interoperability across intelligence disciplines to include NATO interoperability and management of DCGS IPT effort for USD(I) *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
MAJOR THRUST: Continue DCGS-I Testbed development and upgrades. *FY 2009 Accomplishments:* In FY 2009: Continued to develop and upgrade the DCGS-I Testbed. *FY 2010 Plans:* In FY 2010: Continue DCGS-I Testbed development and upgrades. *FY 2011 Base Plans:* In FY 2011: Continue DCGS-I Testbed development and upgrades.	3.895	3.956	4.014	0.000	4.014

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: In FY 2011 OCO: N/A					
MAJOR THRUST: Continue to integrate commercial imagery capability into AF DCGS. *FY 2009 Accomplishments:* In FY 2009: Continued commercial imagery integration. *FY 2010 Plans:* In FY 2010: Continue commercial imagery integration. *FY 2011 Base Plans:* In FY 2011: Continue commercial imagery integration. *FY 2011 OCO Plans:* IN FY 2011 OCO: N/A	2.962	2.900	2.900	0.000	2.900
Accomplishments/Planned Programs Subtotals	63.953	70.152	82.509	0.000	82.509

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0305208F: *Distributed Common Ground Systems (OPAF)*	221.032	381.805	271.015	71.350	342.365	310.210	177.998	165.065	318.671	0.000	0.000

D. Acquisition Strategy

The Air Force has changed the AF DCGS acquisition strategy from a single block upgrade to incremental modifications during sustainment integrating mature advanced technologies and multi-intelligence exploitation tools while meeting emerging operational requirements and integrating new/upgraded sensors.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*	**PROJECT** 674826: *Common Imagery Ground / Surface Systems*

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 Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Block 10.2 Spiral Upgrades	C/Various	Raytheon Garland, TX, Lockheed Martin: Goodyear, AZ, L3...	37.255	0.000		0.000		0.000		0.000	0.000	37.255	336.473
Modernization/ modification efforts and integration of new sensors and operational capabilities	C/Various	Various Various	5.974	50.208	Oct 2009	63.351	Oct 2010	0.000		63.351	Continuing	Continuing	Continuing
Network Communications Upgrade	C/Various	Raytheon Garland, TX, Lockheed Martin: Goodyear, AZ	3.807	2.400	May 2010	2.500		0.000		2.500	Continuing	Continuing	Continuing
DCGS IPT for USD(I)	C/Various	Science Applications Int'l Mclean, VA	2.421	2.888	Mar 2010	2.644	Mar 2011	0.000		2.644	Continuing	Continuing	Continuing
Testbed Modernization and Licenses	C/Various	Northrop Grumman Baltimore, MD, Raytheon: Garland, TX, L3: Good...	3.895	3.956	Mar 2010	4.014	Mar 2011	0.000		4.014	Continuing	Continuing	Continuing
DIB Management, Migration & Interoperability	C/Various	Raytheon Garland, TX, Integrity Applications: Washingto...	7.639	7.800	Feb 2010	7.100	Feb 2011	0.000		7.100	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Commercial Satellite Imagery	C/Various	AR Gov't Systems Group Thousand Oaks, CA	2.962	2.900	Jan 2010	2.900	Jan 2011	0.000		2.900	0.000	8.762	0.000
		Subtotal	63.953	70.152		82.509		0.000		82.509			

Remarks

	Total Prior Years Cost	FY 2010 Cost	FY 2010 Award Date	FY 2011 Base Cost	FY 2011 Base Award Date	FY 2011 OCO Cost	FY 2011 OCO Award Date	FY 2011 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	63.953	70.152		82.509		0.000		82.509			

Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*	**PROJECT** 674826: *Common Imagery Ground / Surface Systems*

AF DCGS
Program Element Schedule

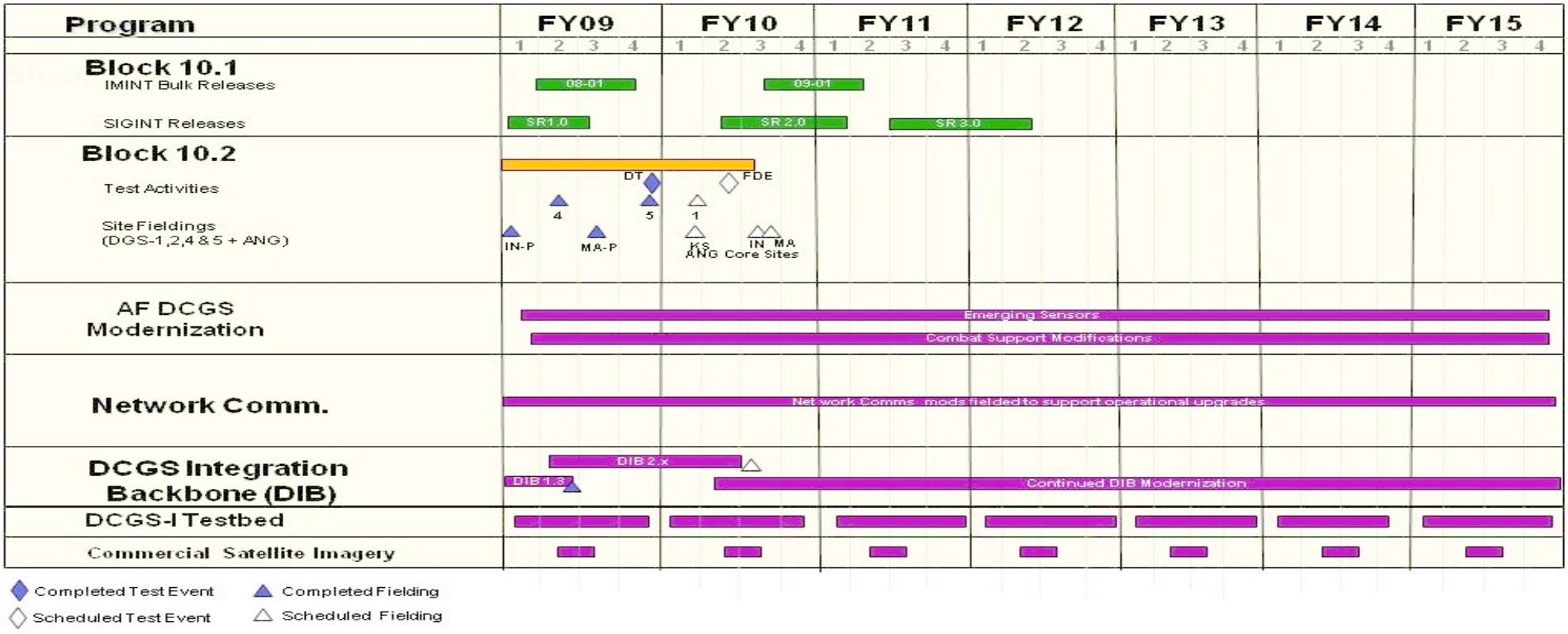


Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 674826: *Common Imagery Ground / Surface Systems*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Block 10.2 Developmental and Operational Testing and Site Fielding	1	2009	3	2010
AF DCGS Modernization: Emerging sensor integration and Combat Support modifications	1	2009	4	2011
Network Communications upgrades	1	2009	4	2011
DIB Version Release (1.3)	2	2009	2	2009
DIB Version Release (2.0)	3	2010	3	2010

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 675265: *Common Imagery Processor (CIP)*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
675265: *Common Imagery Processor (CIP)*	11.298	12.252	10.889	0.000	10.889	10.884	10.788	10.951	11.112	0.000	0.000
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Common Imagery Processor (CIP) is a major interoperability initiative to develop a common sensor processing element within DCGS-Imagery architecture. The function of the CIP is to accept airborne imagery data, process it into an exploitable image, and output the image to other elements within DCGS-I. Efforts are underway to augment the CIP baseline to process data from upgraded/new sensors.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Continue to develop the CIP to keep pace with growing sensor baseline. (Baseline includes Global Hawk, F/A-18, and U-2 sensors).	11.298	12.252	10.889	0.000	10.889
FY 2009 Accomplishments: In FY 2009: Continued to evolve the CIP and its associated architecture to keep pace with growing sensor baseline to include new and upgraded sensors. Continued to investigate and implement advanced processing tools.					
FY 2010 Plans: In FY 2010: Continue to evolve the CIP and its associated architecture to keep pace with growing sensor baseline to include new and upgraded sensors. Continue to investigate and implement advanced processing tools.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 675265: *Common Imagery Processor (CIP)*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: In FY 2011: Continue to evolve the CIP and its associated architecture to keep pace with growing sensor baseline to include new and upgraded sensors. Continue to investigate and implement advanced processing tools. *FY 2011 OCO Plans:* In FY 2011 OCO: N/A					
Accomplishments/Planned Programs Subtotals	11.298	12.252	10.889	0.000	10.889

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0305308F: *Distributed Common Ground System (OPAF)*	2.947	3.051	3.200	0.000	3.200	3.225	3.300	3.399	3.501	0.000	0.000

D. Acquisition Strategy

For the CIP, 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 Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 675265: *Common Imagery Processor (CIP)*

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CIP Software Development	C/CPFF	Northrop Grumman Baltimore MD	10.798	11.752	Dec 2010	10.389	Dec 2011	0.000		10.389	Continuing	Continuing	Continuing
		Subtotal	10.798	11.752		10.389		0.000		10.389			

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
303 Aeronautical Systems Wing (AESW)	C/Various	303 AESW Wright-Patterson AFB, OH	0.500	0.500		0.500		0.000		0.500	Continuing	Continuing	Continuing
		Subtotal	0.500	0.500		0.500		0.000		0.500			

Remarks

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	11.298	12.252		10.889		0.000		10.889			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	R-1 ITEM NOMENCLATURE PE 0305208F: *Distributed Common Ground Systems*	PROJECT 675265: *Common Imagery Processor (CIP)*	

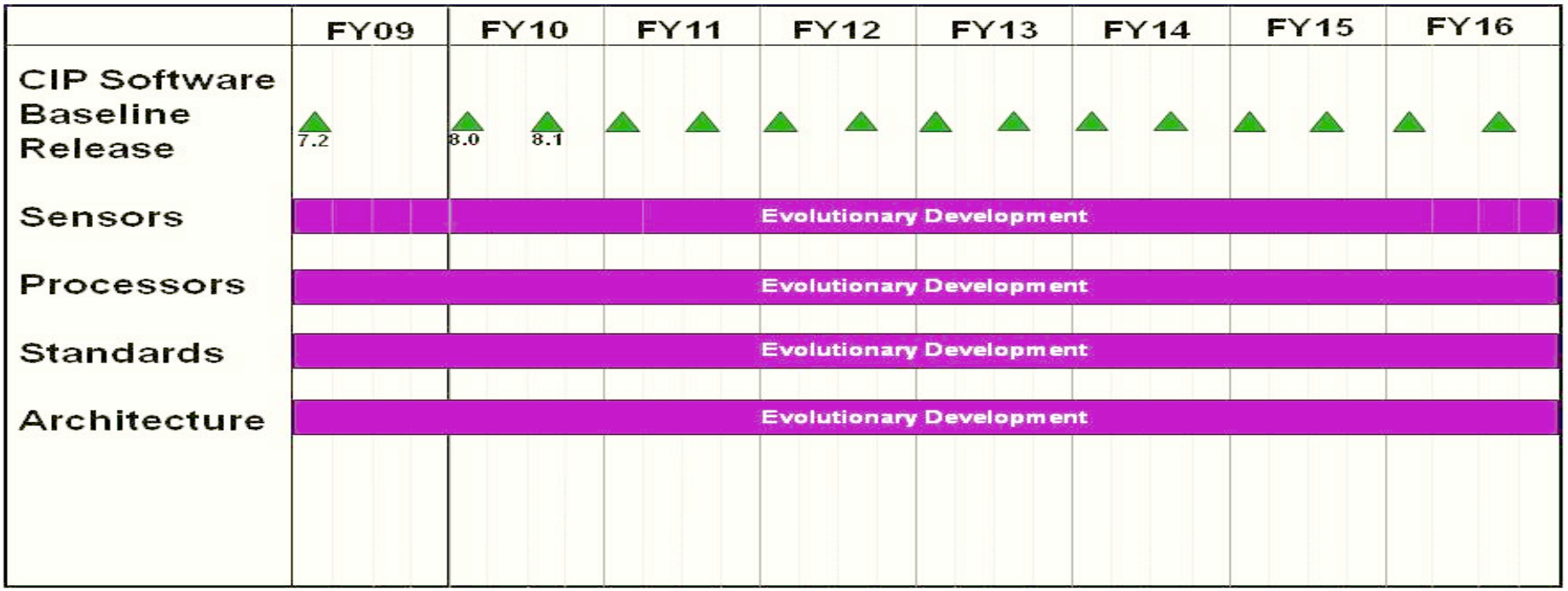
	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract

Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*	**PROJECT** 675265: *Common Imagery Processor (CIP)*

CIP Program Schedule



PB11 R-Docs

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 3600: *Research, Development, Test & Evaluation, Air Force* BA 7: *Operational Systems Development*	**R-1 ITEM NOMENCLATURE** PE 0305208F: *Distributed Common Ground Systems*	**PROJECT** 675265: *Common Imagery Processor (CIP)*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
CIP 7.2 Software Release	1	2009	1	2009
CIP 8.0 Software Release	1	2010	1	2010
CIP 8.1 Software Release	3	2010	3	2010
CIP Software Release FY11	1	2011	1	2011
CIP Software Release FY11 (1)	3	2011	3	2011