

Exhibit 300 FY2010

FAAXX601: En Route Communications Gateway (ECG)

Part I: Summary Information And Justification (All Capital Assets)

Description: In Part I, complete Sections A, B, C, and D for all capital assets (IT and non-IT). Complete Sections E and F for IT capital assets.

I.A. Overview (All Capital Assets)

Description: The following series of questions are to be completed for all investments.

I.A.1. Date of Submission:	2009-03-10
I.A.2. Agency:	021
I.A.3. Bureau:	12
I.A.4. Name of this Capital Asset: Description: (Up to 250 characters)	FAAXX601: En Route Communications Gateway (ECG)
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53. For all other, use agency ID system.	021-12-01-11-01-1120-00
I.A.6. What kind of investment will this be in FY2010? Description: Please NOTE: Investments moving to O&M in FY2010, with Planning/Acquisition activities prior to FY2010 should not select O&M. These investments should indicate their current status.	Operations and Maintenance
I.A.8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap: Description: (Up to 2500 characters)	<p>The En Route Automation Programs provide automation infrastructure improvements at the 20 Air Route Traffic Control Centers (ARTCCs) in the continental U.S. ECG routes real-time, processed data, essential for Air Traffic Control to the Central Computer Complex HOST to support efficient and safe control of Air Traffic. ECG is the central point where mission-critical flight and surveillance data enter and exit FAA ARTCCs. ECG supports the FAA's performance gap mission by replacing the Peripheral Adapter Module Replacement Item (PAMRI) with high availability, Commercial-Off-The-Shelf (COTS) components that support modern, open standards and protocols, as well as replacing and subsuming the legacy interface functions. ECG also supports the FAA missions of increased safety and greater capacity by increasing the surveillance sources from 24 radars to 64 radars. ECG supports safety by automating failure recovery abilities of critical and essential services and allowing for continuous operations during scheduled maintenance. Critical and Essential services are services required 99.999 % and 99.9% of the time, respectively, for safe separation and control of aircraft operating in FAA's National Air Space (NAS). The FAA Joint Resources Council (JRC) approved ECG procurement on March 13, 2002. In-Service Decision (ISD) occurred on April 27, 2004. At FY06 end, all 20 operational systems were fully operational and in the Evaluate Phase. The ECG program will use BY10 funding to 1) conduct operational analysis (OA) to verify that the system is providing the benefits, performance, and level of service specified 2) conduct Sustainment and Technology Evolution Plan (STEP) activities to mitigate performance and obsolescence risks 3) support oversight committees such as Service Level Review (SLR), and 4) address Information System Security requirements that include Security Certification Authorization Package (SCAP) remediation activities, conducting yearly validation testing of the Contingency Disaster Recovery Plan, and FISMA Reporting requirements. STEP documents an approach for sustaining the ECG technical baseline by monitoring systems components for obsolescence and identifying the best alternatives for mitigating obsolescence issues.</p>
I.A.9. Did the Agency's Executive/Investment Committee approve this request?	yes
I.A.9.a. If "yes," what was the date of this approval?	2002-03-13
I.A.10. Did the Project Manager review this Exhibit?	yes
I.A.12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project?	yes
I.A.12.a. Will this investment include electronic assets (including computers)?	yes
I.A.12.b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	no
I.A.12.b.1. If "yes," is an ESPC or UESC being used to help fund this investment?	
I.A.12.b.2. If "yes," will this investment meet sustainable design principles?	
I.A.12.b.3. If "yes," is it designed to be 30% more energy efficient than relevant code?	
I.A.13. Does this investment directly support any of the PMA initiatives?	no
I.A.13.a. If "yes," select all that apply:	
I.A.13.b. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-	

Gov is selected, is it an approved shared service provider or the managing partner? Description: (Up to 500 characters)	
I.A.14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? Description: (For more information about the PART, visit www.whitehouse.gov/omb/part .)	yes
I.A.14.a. If "yes," does this investment address a weakness found during a PART review?	yes
I.A.14.b. If "yes," what is the name of the PARTed program?	10001121 - FAA Air Traffic Services
I.A.14.c. If "yes," what rating did the PART receive?	Adequate
I.A.15. Is this investment for information technology?	yes
I.A.16 What is the level of the IT Project? (per CIO Council PM Guidance) Description: Level 1 - Projects with low-to-moderate complexity and risk. Example: Bureau-level project such as a stand-alone information system that has low- to-moderate complexity and risk. Level 2 - Projects with high complexity and/or risk which are critical to the mission of the organization. Examples: Projects that are part of a portfolio of projects/systems that impact each other and/or impact mission activities. Department-wide projects that impact cross-organizational missions, such as an agency-wide system integration that includes large scale Enterprise Resource Planning (e.g., the DoD Business Mgmt Modernization Program). Level 3 - Projects that have high complexity, and/or risk, and have government-wide impact. Examples: Government-wide initiative (E-GOV, President's Management Agenda). High interest projects with Congress, GAO, OMB, or the general public. Cross-cutting initiative (Homeland Security).	Level 3
I.A.17. In addition to the answer in 1.A.11.d, what project management qualifications does the Project Manager have? (per CIO Council PM Guidance)	(1) Project manager has been validated as qualified for this investment
I.A.18. Is this investment or any project(s) within this investment identified as "high risk" on the Q4-FY 2008 agency high risk report? (per OMB Memorandum M-05-23)	no
I.A.19. Is this a financial management system?	no
I.A.19.a. If "yes," does this investment address a FFIA compliance area?	
I.A.19.a.1. If "yes," which compliance area: Description: (Up to 250 characters)	
I.A.19.a.2. If "no," what does it address? Description: (Up to 500 characters)	
I.A.19.b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52 Description: (Up to 2500 characters)	
I.A.20. What is the percentage breakout for the total FY2010 funding request for the following? Description: (This should total 100%)	
I.A.20.a. Hardware	21
I.A.20.b. Software	34
I.A.20.c. Services	28
I.A.20.d. Other	17
I.A.21. If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities?	n/a
I.A.23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval?	yes
I.A.24. Does this investment directly support one of the GAO High Risk Areas?	no
I.B. Summary of Spending (All Capital Assets)	
I.B.1 Summary of Spending Table Description: Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated "Government FTE Cost," and should be excluded from the amounts shown for "Planning," "Full Acquisition," and "Operation/Maintenance." The "TOTAL" estimated annual cost of the investment is the sum of costs for "Planning," "Full Acquisition," and "Operation/Maintenance." For Federal buildings and facilities, life-cycle costs should include long-term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this	

report.

Note: For the multi-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

I.B.1.a. Summary of Spending for Project Phases

	PY-1 and earlier	PY 2008	CY 2009	BY 2010
Planning	\$14.351	\$0.000	\$0.000	\$0.000
Acquisition	\$221.649	\$0.000	\$0.000	\$0.000
Subtotal Planning and Acquisition	\$236.000	\$0.000	\$0.000	\$0.000
Operations and Maintenance	\$34.616	\$13.175	\$16.156	\$14.742
TOTAL	\$270.616	\$13.175	\$16.156	\$14.742
Government FTE Costs	\$12.711	\$1.809	\$1.884	\$1.963

I.B.1.b. Summary of Spending for Project Phases (Government FTE Costs Only)

	PY-1 and earlier	PY 2008	CY 2009	BY 2010
Number of FTE represented by cost	120	15	15	15

I.B.2. Will this project require the agency to hire additional FTE's? no

I.B.2.a. If "yes," How many and in what year?

Description: (Up to 500 characters)

I.B.3. If the summary of spending has changed from the FY2009 President's budget request, briefly explain those changes:

Description: (Up to 2500 characters)

The SoS Table was updated to reflect the latest CIP. BY2009 and BY2010 were decreased by \$3.3 million and \$6.9 million respectively, while BY2011 and BY2014 were increased by \$3.3 million and \$6.9 million respectively. The number of Government FTEs was rounded up by .5 in BY2007 - BY2013 resulting in an additional 3.5 man years, because WorkLenz only allows entry of whole numbers.

I.D. Performance Information (All Capital Assets)

I.D.1. Performance Information Table

Description: In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures (indicators) must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov. The table can be extended to include performance measures for years beyond the next President's Budget.

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Grouping	Measurement Indicator
2005	Reduced Congestion	Mission and Business Results	Air Transportation	Availability
2005	Reduced Congestion	Technology	IT Contribution to Process, Customer, or Mission	Lifecycle management process to better support ECG product obsolescence issues
2005	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2005	Reduced Congestion	Technology	Functionality	New capability Integration
2006	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2006	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2006	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2006	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance

				and compliance.
2006	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2007	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2007	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2007	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2007	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2007	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2008	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2008	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2008	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2008	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2008	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2009	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2009	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2009	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2009	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2009	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2010	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2010	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2010	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2010	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2010	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2011	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2011	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2011	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2011	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2011	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2012	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays

				attributable to ECG Hardware or Software failures.
2012	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2012	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2012	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2012	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance
2013	Reduced Congestion	Customer Results	Customer Satisfaction	Number of flights delays attributable to ECG Hardware or Software failures.
2013	Reduced Congestion	Mission and Business Results	Lifecycle/Change Management	Impact of commercial product obsolescence
2013	Reduced Congestion	Mission and Business Results	Air Transportation	ECG System Availability to provide radar surveillance and flight data to ARTCCs.
2013	Reduced Congestion	Processes and Activities	Security	Remediation of issues documented in the SCAP produces higher levels of information security assurance and compliance.
2013	Reduced Congestion	Technology	Standards Compliance and Deviations	Open system standards compliance

I.F. Enterprise Architecture (EA) (IT Capital Assets only)

Description: In order to successfully address this area of the capital asset plan and business case, the investment must be included in the agency's EA and Capital Planning and Investment Control (CPIC) process and mapped to and supporting the FEA. The business case must demonstrate the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency's EA.

I.F.1. Is this investment included in your agency's target enterprise architecture?	yes
I.F.1.a. If "no," please explain why? Description: (Up to 2500 characters)	
I.F.2. Is this investment included in the agency's EA Transition Strategy?	yes
I.F.2.a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment. Description: (Up to 500 characters)	EnRoute Communications Gateway (ECG)
I.F.2.b. If "no," please explain why? Description: (Up to 2500 characters)	
I.F.3. Is this investment identified in a completed and approved segment architecture?	yes
I.F.3.a. If "yes," provide the six digit code corresponding to the agency segment architecture. The segment architecture codes are maintained by the agency Chief Architect. For detailed guidance regarding segment architecture codes, please refer to http://www.egov.gov . Description: (In the format "XXX-000")	102-000

I.F.4. Service Component Reference Model (SRM) Table

Description: Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table. For detailed guidance regarding components, please refer to <http://www.egov.gov>.

- Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.
- A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.
- 'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.
- Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in this column can, but are not required to, add up to 100%.

Agency Component Name	Agency Component Description	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused - Component Name (b)
ATC-Separation Assurance-	Aircraft are separated from	Security Management	Identification and	

Aircraft-Terrain Obstacles	terrain and obstacles using published safety zones and processing position and intent information. Aircraft positions are derived from navigational systems, surveillance information, visual orientation, and position reports to ensure an aircrafts trajectory maintains a minimum safe distance from ground, mountainous terrain, and man-made obstacles. (NAS ATC-Separation Assurance)		Authentication	
ATC-Separation Assurance-Aircraft-Terrain Obstacles	Aircraft are separated from terrain and obstacles using published safety zones and processing position and intent information. Aircraft positions are derived from navigational systems, surveillance information, visual orientation, and position reports to ensure an aircrafts trajectory maintains a minimum safe distance from ground, mountainous terrain, and man-made obstacles. (NAS ATC-Separation Assurance)	Data Management	Data Exchange	
TM Synchronization- Airborne	Airborne synchronization or spacing and sequencing of air traffic safely maximize the efficiency and capacity of the NAS throughout the cruise, arrival, and departure phases of flight. Traffic synchronization is provided to aircraft during cruise, through metering at fixes/waypoints, and modifying traffic flow patterns to meet operational objectives and accommodate user preferences. (NAS-TM Synchronization)	Security Management	Identification and Authentication	
TM Synchronization- Airborne	Airborne synchronization or spacing and sequencing of air traffic safely maximize the efficiency and capacity of the NAS throughout the cruise, arrival, and departure phases of flight. Traffic synchronization is provided to aircraft during cruise, through metering at fixes/waypoints, and modifying traffic flow patterns to meet operational objectives and accommodate user preferences. (NAS-TM Synchronization)	Data Management	Data Exchange	

I.F.5. Technical Reference Model (TRM) Table

Description: To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

- a. Service Components identified in the previous question should be entered in this column. Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications.
- b. In the Service Specification field, agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.

FEA SRM Component (a)	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification (b) (i.e., vendor and product name)
Identification and Authentication	Component Framework	Security	Supporting Security Services	Solaris 8, Cisco IOS 12.4(5a), NetView 7.1.2
Data Exchange	Service Access and Delivery	Delivery Channels	Internet	1. TCP/IP Protocol Suite; 2. Ethernet; 3. Serial Communications
Identification and Authentication	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	Solaris 8, Cisco IOS 12.4(5a), and 12.2(25) SEE1, NetView

				7.1.2
Identification and Authentication	Service Access and Delivery	Service Requirements	Legislative / Compliance	Solaris 8, Cisco IOS 12.4(5a), and 12.2(25) SEE1, NetView 7.1.2
Data Exchange	Service Access and Delivery	Service Transport	Service Transport	1. Sun 280R Server w/ Solaris 8; 2. Sun Blade 1500 Workstation; 3. ECG Local Area Network (LAN); 4. CISCO 3725 Router
Data Exchange	Service Platform and Infrastructure	Delivery Servers	Portal Servers	Sun 280R Server w/ Solaris 8
Data Exchange	Service Platform and Infrastructure	Hardware / Infrastructure	Peripherals	HP Laser Printer; Keyboard; ViewSonic Flat Screen Monitor; Mouse; Logitech Speakers
Data Exchange	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	1. Cisco 3725 Router w/IOS 12.4(5a);2. Sun Blade 1500 WS;3. Sun 280R Server w/Solaris 8;4. 8 Port Modem Splitter;5. 2950T NW Switch;6. I/O Exp. Chassis;7. Pwr Dist. Unit;8. Intel Pentium based PC;9. CPS1600 Term Svr;10. Netview 7.1.2; 'Gateway'

I.F.6. Will the application leverage existing components and/or applications across the Government (e.g. USA.gov, Pay.gov, etc.)?

no

I.F.6.a. If "yes," please describe.
Description: (Up to 2500 characters)

Part IV: Planning for "Multi-Agency Collaboration" ONLY

Description: Part IV should be completed only for investments identified as an E-Gov initiative, a Line of Business (LOB) Initiative, or a Multi-Agency Collaboration effort. The "Multi-Agency Collaboration" choice should be selected in response to Question 6 in Part I, Section A above. Investments identified as "Multi-Agency Collaboration" will complete only Parts I and IV of the exhibit 300.

IV.A. Multi-Agency Collaboration Oversight (All Capital Assets)

Description: Multi-agency Collaborations, such as E-Gov and LOB initiatives, should develop a joint exhibit 300.

IV.A.1. Stakeholder Table

Description: As a joint exhibit 300, please identify all the agency stakeholders (all participating agencies, this should not be limited to agencies with financial commitment). All agency stakeholders should be listed regardless of approval. If the partner agency has approved this joint exhibit 300 please provide the date of approval.

IV.A.9. Will the selected alternative replace a legacy system in-part or in-whole?

IV.A.9.a. If "yes," are the migration costs associated with the migration to the selected alternative included in this investment, the legacy investment, or in a separate migration investment?

IV.A.9.b. If "yes," please provide the following information: