

Exhibit 300 FY2011

FAAXX711: Data Communications NextGen Support (DataComm)

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:	2010-02-12
I.A.2. Agency:	021
I.A.3. Bureau:	12
I.A.4. Name of this Investment: Description: (Up to 250 characters)	FAAXX711: Data Communications NextGen Support (DataComm)
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53.9. For all other, use agency ID system.	021-12-01-12-01-1040-00
I.A.6. What kind of investment will this be in FY2011? Description: Please NOTE: Investments moving to O&M in FY2011, with Planning/Acquisition activities prior to FY2011 should not select O&M. These investments should indicate their current status.	Planning
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; this description may include links to relevant information which should include relevant GAO reports, and links to relevant findings of independent audits. Description: (Up to 2500 characters)	
Air traffic management in the National Airspace System (NAS) is dependent upon rapid reliable communications between air traffic controllers and pilots. The present voice-based air/ground infrastructure will not support the anticipated growth in air traffic. Since controllers currently communicate with pilots using voice, revisions to aircraft flightpaths are made through multiple instructions or lengthy verbal exchange. This process is workload intensive, often requires instructions to be repeated, and is prone to verbal communication errors. Increased controller workload and flight delays are the result, which impact the capacity of the NAS. Many of the transformational improvements associated with the Next Generation Air Transportation System (NextGen), including trajectory-based flight and net-centric operations, cannot be achieved using the present voice system. Data Communications will bridge this gap, and is an essential pre-requisite for NextGen, and to ensure the NAS has the capacity to grow. Data Communications will implement services that maximize controller productivity, reduce operational errors associated with voice communications, and reduce delays. Data Communications is comprised of automation enhancements for air traffic control message generation and exchange (hardware and software), and the communications data link between aircraft and ground users. Automation enhancements and link acquisition will begin in 2011, with initial operations in FY 2016, so initial benefits from Data Communications will be realized beginning 2018. A positive Initial Investment Decision transpired in July 2008. The program is projected to have a Final Investment Decision during the 4th quarter of 2011. The BY10 costs include planning costs, which are subject to change during the Final Investment Analysis phase. The Data Communications plan calls for incremental development and deployment, so the program anticipates planning activities and costs to change as subsequent program segments proceed through the investment analysis process. Since Data Communications is in the planning phase, cost, schedule, and performance data reflect the current program plan, which will continue to be refined as the planning is refined. Internal reprogramming funded early planning activities. Program funding began in FY08.	
I.A.8.a. Enter dates for approved rebaselining, alternative analysis, and risk management plan and risk register information. Description: Provide here the date of any approved rebaselining within the past year, the date for the most recent (or planned) alternatives analysis for this investment, and whether this investment has a risk management plan and risk register. (Up to 500 characters)	The Risk Plan was updated on 06/16/2009. FID 1A is scheduled for 03/31/2012. Data Comm is in the planning phase and is not baselined.
I.A.9. Did the Agency's Executive/Investment Committee approve this request?	no
I.A.9.a. If "yes," what was the date of this approval?	
I.A.12. If this investment is a financial management system, then please fill out the following as reported in the most recent financial systems inventory (FMSI):	
I.A.12.a. Financial Management System Table	
I.A.12.b. If this investment is a financial management system AND the investment is part of the core financial system then select the primary FFMA compliance area that this investment addresses (choose only one):	

I.B. Summary of Funding (Budget Authority for Capital Assets)

I.B.1. Summary of Funding 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. Funding for all costs associated with the entire life-cycle of the investment should be included in this report. Funding levels should be shown for budget authority by year consistent with funding levels in Exhibit 53. The

Summary of Funding table shall include the amounts allocated to the investment from, and should be directly tied to, the Fiscal Year Budget. This includes direct appropriations (discretionary or mandatory accounts), user fees, and approved self-funding activities and will provide the actual annual "budget" for the investment. This "budget" will be a subset of the congressionally approved budget for each fiscal year. This will provide Departments/Agencies and OMB useful information on the actual Fiscal Year dollars being asked for and spent on an investment.

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 (Reported in Millions)

	PY-1 and earlier	PY 2009	CY 2010	BY 2011
Planning	\$7.400	\$28.800	\$30.840	\$26.680
Acquisition	\$0.000	\$0.000	\$15.870	\$126.320
Subtotal Planning and Acquisition	\$7.400	\$28.800	\$46.710	\$153.000
Operations and Maintenance	\$0.000	\$0.000	\$0.000	\$0.000
Disposition Costs (Optional)	\$0.000	\$0.000	\$0.000	\$0.000
SUBTOTAL	\$7.400	\$28.800	\$46.710	\$153.000
Government FTE Costs	\$2.280	\$2.390	\$2.700	\$3.040
TOTAL	\$9.680	\$31.190	\$49.410	\$156.040

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

	PY-1 and earlier	PY 2009	CY 2010	BY 2011
Number of FTE represented by Costs	13	14	14	15

I.B.2. If the summary of funding has changed from the FY2010 President's budget request, briefly explain those changes:
Description: (Up to 2500 characters)

FY08 is the first year as a Capital Investment Project and the second year of submitting an Exhibit 300. This is a planning Exhibit 300 since the program is in the early stages of Final Investment Analysis, so all estimates are subject to change. FY08 funding supported the planning and investment analysis activities required to reach an Initial Investment Decision such as benefits modeling, business case development, and alternative analysis resulting in the identification of the preferred alternative. FY09 funding will support the completion of activities required to reach a Final Investment Decision (FID), the planning activities to implement basic data services in Segment One and trajectory-based flight in Segment Two, and acquisition documentation for contract award(s). FY09 and FY10 consists of planning, avionics development and validation, demos and prototyping, and early En-Route engineering. Further planning activities include the refinement of estimates to establish a final baseline at the FY11 JRC FID, and to support Segment Two planning activities. Funding levels identified in the Summary of Spending (SOS) Table for FY10 and beyond, as well as the total lifecycle costs for the Data Communications Program, reflect the cost estimates developed during Initial Investment Analysis phase (IIA) and updates thereafter. The SOS estimates are consistent with the current CIP. All cost estimates are subject to change. In accordance with FAA's Acquisition Management System process, the costs were refined for the Initial Investment Decision (IID), and will be further refined and baselined at the FY11 FID. FY12 has initial Operations costs associated with Security Certification and Authorization Package (SCAP) activities in the Towers and the Air-Ground Communications Network. \$300K is IOT&E and is not a part of the baseline, and so it was not included in FY11.

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 and the relevant Agency Segment Architecture. The investment must discuss its performance measures in support of the agency's mission and strategic goals as outlined in the corresponding Segment Architecture. Performance measures (indicators) must be provided. 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 <http://www.whitehouse.gov/omb/e-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
2008	Safety	Customer Results	Accuracy of Service or Product Delivered	Projected Indicator Metric: Operational errors due to miscommunications
2008	Reduced Congestion	Mission and Business Results	Air Transportation	Projected Indicator Metric: National Airspace System Air Traffic Capacity
2008	Reduced Congestion	Processes and Activities	Productivity	Projected Indicator Metric: Number of aircraft per air traffic controller
2008	Global Connectivity	Technology	Availability	Projected Indicator Metric:

				Percent of Data-equipped aircraft that can be supported by the National Airspace System
2009	Safety	Customer Results	Accuracy of Service or Product Delivered	Projected Indicator Metric: Operational errors due to miscommunications
2009	Reduced Congestion	Mission and Business Results	Air Transportation	Projected Indicator Metric: National Airspace System Air Traffic Capacity
2009	Reduced Congestion	Processes and Activities	Productivity	Projected Indicator Metric: Number of aircraft per air traffic controller
2009	Global Connectivity	Technology	Availability	Projected Indicator Metric: Percent of Data-equipped aircraft that can be supported by the National Airspace System
2010	Safety	Customer Results	Accuracy of Service or Product Delivered	Projected Indicator Metric: Operational errors due to miscommunications
2010	Safety	Customer Results	Accuracy of Service or Product Delivered	Projected Indicator Metric: Baseline estimates for operational errors due to miscommunications.
2010	Reduced Congestion	Mission and Business Results	Air Transportation	Projected Indicator Metric: National Airspace System Air Traffic Capacity
2010	Reduced Congestion	Mission and Business Results	Air Transportation	Projected Indicator Metric: Baseline estimates for National Airspace System Air Traffic Capacity.
2010	Reduced Congestion	Processes and Activities	Productivity	Projected Indicator Metric: Number of aircraft per air traffic controller
2010	Reduced Congestion	Processes and Activities	Productivity	Projected Indicator Metric: Baseline estimates for the number of aircraft per air traffic controller .
2010	Global Connectivity	Technology	Availability	Projected Indicator Metric: Percent of Data-equipped aircraft that can be supported by the National Airspace System
2010	Global Connectivity	Technology	Availability	Projected Indicator Metric: Baseline estimates for percent of Data-equipped aircraft that can be supported by the National Airspace System.
2011	Safety	Customer Results	Accuracy of Service or Product Delivered	Projected Indicator Metric: Operational errors due to miscommunications
2011	Safety	Customer Results	Accuracy of Service or Product Delivered	Projected Indicator Metric: Baseline estimates for operational errors due to miscommunications.
2011	Global Connectivity	Technology	Availability	Projected Indicator Metric: Percent of Data-equipped aircraft that can be supported by the National Airspace System
2011	Reduced Congestion	Mission and Business Results	Air Transportation	Projected Indicator Metric: Baseline estimates for National Airspace System Air Traffic Capacity.
2011	Reduced Congestion	Processes and Activities	Productivity	Projected Indicator Metric: Number of aircraft per air traffic controller
2011	Reduced Congestion	Processes and Activities	Productivity	Projected Indicator Metric: Baseline estimates for the number of aircraft per air traffic controller .
2011	Global Connectivity	Technology	Availability	Projected Indicator Metric: Percent of Data-equipped aircraft that can be supported by the National Airspace System
2011	Global Connectivity	Technology	Availability	Projected Indicator Metric: Baseline estimates for percent of Data-equipped aircraft that

				can be supported by the National Airspace System.
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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.

Have the requisite investment-level architecture documentation requirements (e.g., reference model mappings, FTF mappings, etc.) for this investment been documented in the corresponding Segment Architecture? For detailed guidance regarding segment architecture requirements, please refer to <http://www.whitehouse.gov/omb/e-gov/>. See this guidance also regarding the reporting of six digit codes corresponding to agency segment architectures in Exhibit 53, and, for limited cases determined by the Chief Architect, reporting an investment alignment with multiple segments.

I.F.1. Is this investment included in your agency's target enterprise architecture?	yes
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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.5. Does this investment replace any legacy systems investments?

Description: Disposition costs (costs of retirement of legacy systems) may be included as a category in Part I, Section B, Summary of Funding, or in separate investments, classified as major or non-major. For legacy system investments being replaced by this investment, include the following data on these legacy investments.