

## Exhibit 300 FY2011

### FAAXX732: NextGen Network Enabled Weather (NNEW) Segment 1

#### 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)	FAAXX732: NextGen Network Enabled Weather (NNEW) Segment 1
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53.9. For all other, use agency ID system.	021-12-01-21-01-4300-00
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)	
<p>The NNEW Exhibit is being submitted for the first time and is in the planning stage. NNEW will provide the needed improvements to partially fill the performance gaps by rolling out the program through a series of segments consisting of multiple capabilities that impact the mission of the NAS. Weather is often the tipping point for delay and safety in NAS operations. NNEW supports the FAA Strategic Goal of Greater Capacity by working with local governments and airspace users to provide increased capacity in the United States airspace system that reduces congestion and meets projected demand in an environmentally sound manner. Objective 1 - Increase capacity to meet projected demand and reduce congestion. Weather information is needed for air traffic management and flight operations decisions. These decisions range from the planning of individual flights, to the management of individual terminals and airspace, to managing the capacity of the NAS. Collaboration among decision makers is required to resolve the constraints brought about by weather. Air Traffic Management (ATM), Flight Operations Center (FOC), and flight deck operational decision makers are unable to collaborate effectively in order to make the strategic and tactical decisions of the day. The current procedures for making these decisions are either labor intensive, and/or rely on multiple inputs in order to infer the required decision. The system is unable to support these decision makers due to gaps in today's weather dissemination system; incomplete, inaccurate, and inconsistent weather forecasts; and gaps and inaccuracies in weather observations used to depict current weather conditions and to support forecast generation. Among problems to be addressed in NextGen are: - Weather information not accessible to all users and cannot be manipulated in accordance with user specific needs - Clear, accurate, consistent, complete, and unambiguous aviation weather information not available - Weather products lacking the spatial or temporal resolution required for decisions involving key weather phenomena that impact aviation - Inability to automatically develop and display the impact of weather on current or future NAS capacity - Weather data not well integrated into either manual procedures or automated decision support tools (DST) This Exhibit addresses the weather dissemination gap by creating consistent aviation weather in standard formats.</p>	
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)	Date of Alternatives Analysis for the IID is planned for September 1, 2010. Draft Risk Management Plan initiated on April 22, 2009 and the planned completion date is January 29, 2010.
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 FFMIA 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	\$5.810	\$18.660	\$18.600	\$2.120
Acquisition	\$0.000	\$0.000	\$0.000	\$24.650
Subtotal Planning and Acquisition	\$5.810	\$18.660	\$18.600	\$26.770
Operations and Maintenance	\$0.000	\$0.000	\$0.000	\$0.000
Disposition Costs (Optional)	\$0.000	\$0.000	\$0.000	\$0.000
SUBTOTAL	\$5.810	\$18.660	\$18.600	\$26.770
Government FTE Costs	\$1.190	\$1.340	\$1.400	\$1.480
TOTAL	\$7.000	\$20.000	\$20.000	\$28.250

**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	7	8	8	8

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)

No, this is a new investment starting in BY2011. This activity is in the planning phase, therefore, all costs and dates reflected in the Summary of Spending (SOS) are subject to change until Final Investment Decision (FID) scheduled for 2011.

**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
2009	Greater Capacity	Mission and Business Results	Air Transportation	Initial analysis is underway. NNEW is in the preliminary planning phase and unbaselined metrics, baselines and performance targets will not be finalized until the Final Investment Decision in FY2011. Information in this table is subject to change.
2009	Greater Capacity	Customer Results	Service Availability	Identify Measurement Indicator
2009	Greater Capacity	Processes and Activities	Productivity	Identify Measurement Indicator
2009	Greater Capacity	Technology	External Data Sharing	Projected Indicator Metric: 4-D Wx Cube to provide improved Wx accuracy, availability, statistical reliability, consistency, refresh rates and resolution in time and space.
2010	Greater Capacity	Mission and Business Results	Air Transportation	Projected Indicator Metric: Minimize Impact of Weather on aircraft routing and delays.
2010	Greater Capacity	Customer Results	Service Availability	Projected Indicator: NNEW to provide improved access to weather information by all users (i.e., Wx Dissemination).
2010	Greater Capacity	Processes and Activities	Productivity	Projected Indicator Metric:

				Output of 4-D Wx Cube to provide stakeholders with information to facilitate Air Traffic Management decision making using new applications, decision tools, displays and text products.
2010	Greater Capacity	Technology	External Data Sharing	Projected Indicator Metric: Minimize Impact of Weather on NAS operations (i.e., AOC, Flight Deck, GA, Airport Operations)
2010	Greater Capacity	Technology	Availability	Projected Indicator Metric: 4-D Wx Cube to provide improved Wx accuracy, availability, statistical reliability, consistency, refresh rates and resolution in time and space.
2011	Greater Capacity	Mission and Business Results	Air Transportation	Projected Indicator Metric: Minimize Impact of Weather on aircraft routing & delays
2011	Greater Capacity	Customer Results	Service Availability	Projected Indicator Metric: NNEW to provide improved access to weather information by all users (i.e., Wx Dissemination)
2011	Greater Capacity	Processes and Activities	Productivity	Projected Indicator Metric: Output of 4-D Wx Cube to provide stakeholders with information to facilitate Air Traffic Management decision making using new applications, decision tools, displays and text products
2011	Greater Capacity	Technology	External Data Sharing	Projected Indicator Metric: Minimize Impact of Weather on NAS operations (i.e., AOC, Flight Deck, GA, Airport Operations)
2011	Greater Capacity	Technology	Availability	Projected Indicator Metric: 4-D Wx Cube to provide improved Wx accuracy, availability, statistical reliability, consistency, refresh rates and resolution in time and space.

### 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

### 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.