

Exhibit 300 FY2010

FAAXX016: Integrated Terminal Weather System (ITWS)

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:	2009-03-23
I.A.2. Agency:	021
I.A.3. Bureau:	12
I.A.4. Name of this Capital Asset: Description: (Up to 250 characters)	FAAXX016: Integrated Terminal Weather System (ITWS)
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53. For all other, use agency ID system.	021-12-01-21-01-1010-00
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.	Mixed Life Cycle
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)	ITWS uses new technology to provide air traffic controllers and traffic managers essential weather information by integrating data from multiple sources and using sophisticated algorithms to provide easy-to-understand, immediately usable weather products on color graphic displays. ITWS supports DOT's Mobility goal of increasing reliability throughout the air traffic control (ATC) system, and by 2008, of increasing the percentage of flights arriving on time to 83.6 percent. ITWS helps close the performance gap of the FAA's Greater Capacity goal, Objective 1: Increase airport capacity to meet projected demand. Strategy 1: Improve technologies to make air traffic flow more efficiently during periods of adverse weather. ITWS is used at all levels of FAA ATC facilities, and by the airlines, to reduce weather delays and for collaborative decision-making. The Planning phase began in FY1994 and ended in FY2007 when the four ITWS prototypes were replaced by production systems. The Acquisition phase began in FY1995 and a development contract with production options was competitively awarded to Raytheon in FY1997. The Maintenance phase began in FY2003 with First Operational Readiness Demonstration (ORD). In 2007, the JRC updated the ITWS baseline to include 11 of 12 systems deferred in a May 2004 Rebaseline, add remote ITWS service at 16 secondary/reliever airports (SRAs), and support planning to evolve ITWS into the Next Generation ATC system (NextGen) and System Wide Information Management (SWIM), all within the existing cost baseline. In FY2007 seven systems were installed and four were commissioned. In FY2008, three systems were installed and seven were commissioned, completing the original 22 operational systems and 4 support systems serving 36 airports. Hardware for the 11 systems was procured single source from the ITWS prime contractor in FY2008 and site preparations for installation of the 11 systems and the SRAs began. In FY2009 8 of the remaining 11 systems will be installed and 5 will be commissioned. Funding will also provide for NextGen studies, concept demonstrations, and ITWS weather integration initiatives as part of future NextGen and SWIM capabilities. For BY10, funding is requested to install the final 3 of the remaining ITWS and commission the final 6 of the remaining systems. This will complete the 33 operational systems acquisition program, providing advanced graphical weather informant at 48 airports, 29 of which are OEP level.
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?	2007-11-28
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?	no
I.A.14.b. If "yes," what is the name of the PARTed program?	
I.A.14.c. If "yes," what rating did the PART receive?	
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 2
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	no

"high risk" on the Q4-FY 2008 agency high risk report? (per OMB Memorandum M-05-23)	
I.A.19. Is this a financial management system?	no
I.A.19.a. If "yes," does this investment address a FFMA 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	12
I.A.20.b. Software	1
I.A.20.c. Services	87
I.A.20.d. Other	0
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	\$59.915	\$0.409	\$0.412	\$0.414
Acquisition	\$200.275	\$11.991	\$3.238	\$0.738
Subtotal Planning and Acquisition	\$260.190	\$12.400	\$3.650	\$1.152
Operations and Maintenance	\$7.493	\$1.704	\$2.355	\$2.552
TOTAL	\$267.683	\$14.104	\$6.005	\$3.704
Government FTE Costs	\$10.938	\$2.854	\$3.324	\$3.342

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	108	23	27	25

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 Summary of Spending (SOS) Table was updated to reflect the tech refresh costs added in years 2014-2018 totaling \$18944.0; therefore, the DME baseline now reflects an updated estimate of 301.0M. The difference in acquisition funds has 2 components. 1) As a result of the November 2007 JRC decision, the ITWS DME program baseline was reduced by \$4.0M in FY11. 2) Tech refresh and Disposition costs (\$18.944M) were added to the Acquisition funds total. So \$224.94M (BY09 Ex 300 Acquisition total) - \$4.0M \$18.944M = \$239.884M in BY10. The \$90.255M O&M total shown in the BY09 SOS was incorrect and was updated in the November 2007 JRC decision documentation and now reflects the corrected total of \$89.239M.

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	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of Flight Delays caused by convective weather (These impact the airlines, pilots and the flying public).
2005	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2005	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with capability.
2005	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2006	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2006	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2006	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions 20 minute convective storm cell prediction capability
2007	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2007	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2007	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2007	Mobility	Technology	Functionality	Number of ITWS Airports with convective storm prediction capability capabilities
2007	Mobility	Technology	Functionality	Number of ITWS Airports with Terminal winds capabilities
2008	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2008	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2008	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2008	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2008	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2009	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2009	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2009	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2009	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2009	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2010	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2010	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2010	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2010	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2010	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2011	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2011	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2011	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2011	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2011	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2012	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2012	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2012	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2012	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2012	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2013	Mobility	Mission and Business Results	Air Transportation	Delay Hours
2013	Mobility	Customer Results	Customer Satisfaction	Customer Impacts of flight delays hours caused by convective weather
2013	Mobility	Processes and Activities	Efficiency	Number of ITWS airports with storm cell predictions capability
2013	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities
2013	Mobility	Technology	Functionality	Number of ITWS Airports with capabilities

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.	Integrated Terminal Weather System (ITWS) - FAA

Description: (Up to 500 characters)	
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")	205-000

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>.

- a. Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.
- b. 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.
- c. '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.
- d. 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 - Advisory Weather Advisory Capability	ATC Advisories - Weather information is available either automatically or manually through communication with ATC and other facilities. For example, pilots receive weather advisories from automated surface observing systems and other systems, ATC facilities, and aircraft operations centers (AOCs). Advisories provide both routine and hazardous weather information and/or flight conditions at airports or along a flight path.	Knowledge Management	Knowledge Distribution and Delivery	
ATC Advisory Weather Advisory Capability	ATC Advisories - Weather information is available either automatically or manually through communication with ATC and other facilities. For example, pilots receive weather advisories from automated surface observing systems and other systems, ATC facilities, and aircraft operations centers (AOCs). Advisories provide both routine and hazardous weather information and/or flight conditions at airports or along a flight path.	Knowledge Management	Knowledge Capture	

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)
Knowledge Capture	Service Access and Delivery	Service Transport	Service Transport	SunFire 3800, Solaris 5.8, Cisco 2621, MPS 800, SunBlade 150, Harris (FTI)
Knowledge Capture	Service Access and Delivery	Service Requirements	Legislative / Compliance	SunFire 3800, Solaris 5.8, Cisco 2621, MPS 800, SunBlade 150, Harris (FTI)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	SunFire 3800, Solaris 5.8, Cisco 2621, MPS 800, SunBlade 150, Harris (FTI)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	Cisco 2621, MPS 800, Harris (FTI)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Cisco 2621, MPS 800, Harris (FTI)
Knowledge Distribution and Delivery	Component Framework	Business Logic	Platform Independent Technologies	WebCM (UNIX)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	WebCM (UNIX)
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Software Engineering	Test Management	Sun Fire 280R Server with one 750 MHz UltraSPARC III processor. General Digital monitor and keyboard). MPS-800 servers, Micro-Ener getics LN 100 LT power controller, Sun DLT (Digital Linear Tape)8000 tape drive, Raytheon ITWS Test Tool applications S/W
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	SunFire 3800, Solaris 5.8, Cisco 2621, MPS 800, SunBlade 150, Harris (FTI)
Knowledge Capture	Service Access and Delivery	Access Channels	Other Electronic Channels	SunFire 3800, Solaris 5.8, Cisco 2621, MPS 800, SunBlade 150, Harris (FTI)

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: