# Exhibit 300 FY2010

## FAAXX084: Instrument Flight Procedure Automation (IFPA)

## 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.**

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| I.A.1. Date of Submission: | 2008-12-12 |
| I.A.2. Agency: | 021 |
| I.A.3. Bureau: | 12 |
| I.A.4. Name of this Capital Asset:<br>Description: (Up to 250 characters) | FAAXX084: Instrument Flight Procedure Automation (IFPA) |
| I.A.5. Unique Project (Investment) Identifier:<br>Description: For IT investment only, see section 53. For all other, use agency ID system. | 021-12-01-11-01-3120-00 |
| I.A.6. What kind of investment will this be in FY2010?<br>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)

Instrument Flight Procedures Automation (IFPA) is an automation system used to create new Instrument Flight Procedures (IFPs) and sustain existing IFPs. IFPs provide pilots with an approach path into and out of an airport clear of obstacles such as cell towers, buildings and trees. IFPs are defined operational rules for executing defined maneuvers, which provides safety without direct control from air traffic personnel. The current automation used by the National Flight Procedures Office within Aviation System Standards (AVN), includes a system first implemented in the 1970s. The system is technically obsolete and inefficient. The legacy software is antiquated with no centralized database support and cannot be integrated into the FAA Enterprise Architecture. The majority of the maintenance workload on the 14,000+ existing IFP's within the NAS is being accomplished through manual processes with very limited automation support. This workload has grown by 45% since the mid-1990s. In addition, the number of Obstacle Evaluation (OE) studies has doubled since the late-90s to approximately 40,000 requests per year. A large backlog of work currently exists. The program has implemented a 3-pronged approach to improve efficiency and eliminate the backlog: 1) New automation;2) Contract and Temporary employees;and 3) Policy changes. Three alternatives were considered for the new automation initiative: buy a COTS product, develop In-house, or partner with the DoD. The preferred alternative, partner with the DoD, was selected by the JRC on June 6, 2006, at Initial Investment Decision, then confirmed September 20, 2006 at Final Investment Decision. The DOD has committed to providing one-half of the ongoing maintenance cost for IPDS, beginning in FY10. The DOD users will be added to the FAA user base. IFPA is a suite of tools, which focuses on increasing productivity in AVN's four primary products: IFPs, Amendments to IFPs, OEs, and Notices to Airmen (NOTAMs). The IFPA Program is mixed lifecycle investment. Each software system component can be divided further into sub-components called modules, which will be delivered incrementally. Planned modules are: IPDS Module 1 (FY10), 2 (FY11), and 3 (FY12); OE (part of IPDS module 2); AirNav database (FY10); IFP Modules (FY09-11); APTS Modules (FY08-10). Tech refreshes begin in 2012 and are scheduled thru 2028. Operational analysis will be performed on a periodic basis to measure system performance against the performance baselin

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| 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? | 2006-09-20 |
| 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? | no |
| 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: | |

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| 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?)<br>Description: (Up to 500 characters) | |
| I.A.14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)?<br>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)<br>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.<br>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).<br>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 "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 FFMIA compliance area? | |
| I.A.19.a.1. If "yes," which compliance area:<br>Description: (Up to 250 characters) | |
| I.A.19.a.2. If "no," what does it address?<br>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<br>Description: (Up to 2500 characters) | |
| I.A.20. What is the percentage breakout for the total FY2010 funding request for the following?<br>Description: (This should total 100%) | |
| I.A.20.a. Hardware | 0 |
| I.A.20.b. Software | 97 |
| I.A.20.c. Services | 3 |
| 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? | yes |
| 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 | $1.441 | $0.000 | $0.000 | $0.000 |
| Acquisition | $13.700 | $17.800 | $10.900 | $7.900 |
| Subtotal Planning and Acquisition | $15.141 | $17.800 | $10.900 | $7.900 |
| Operations and Maintenance | $0.689 | $9.564 | $1.597 | $1.615 |
| TOTAL | $15.830 | $27.364 | $12.497 | $9.515 |
| Government FTE Costs | $1.701 | $1.446 | $1.132 | $0.971 |

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 | 13 | 11 | 8 | 7 |

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| 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?<br>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 following comments apply to the II.B.1 (SOS), the Alternatives (Section IIA.2), and the Section II.C4 tables. Removal of IAPA Legacy System: The Budget Year (BY) 08 Exhibit 300 included the O&M costs of the IAPA legacy system that is being replaced by this investment. The legacy costs as well as the IFPA costs were included in the BY08 baseline decision and associated economic analysis, but are outside the scope of this OMB300 which addresses the replacement system. Consequently, legacy system O&M costs were pulled out of the SOS, II.A.2, and II.C.4 tables in the BY09 and BY10 Exhibit 300s. A total of $19.7M was removed, inclusive of FTE costs, comprised of $4.7M in FY07, $4.8M in FY08, $5.0M in FY09, and $5.2M in FY10. O&M Adjustments: O&M Contractor costs of $13.4M, associated with the IAPA legacy system, were removed; comprised of $3.2M in FY07, $3.3M in FY08, $3.4M in FY09, & $3.5M in FY10. O&M FTE costs of $6.3M, associated with the IAPA legacy system, were removed; comprised of $1.5M in FY07, $1.5M in FY08, $1.6M in FY09, & $1.7M in FY10. Funding and variance changes: Expanded requirements/criteria due to changes in RNAV Order 8260.54A, TERPS Order 8260.3B, and Flight Procedures & Airspace Order 8260.19 CHG20 have added $8M of cost to the IPDS project, as well as over 12 months delay to the schedule. On September 5 2008, the FAA Joint Resources Council (JRC) approved carrying a cost and schedule variance and a $8M funding reserve. The $8M funding has been added to the SOS table but not included in table II.C which will carry a negative cost and schedule variance.

## 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 |
|---|---|---|---|---|
| 2007 | Safety | Customer Results | Delivery Time | Number of days from request to publish for an Instrument Flight Procedure (IFP) |
| 2007 | Safety | Mission and Business Results | Air Transportation | Number of WAAS Instrument Flight Procedures published per year |
| 2007 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure |

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|---|---|---|---|---|
| | | | | (IFP) development task time |
| 2007 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) amendment task time |
| 2007 | Safety | Processes and Activities | Efficiency | Obstacle Evaluation (OE) task time |
| 2007 | Safety | Processes and Activities | Efficiency | NOTAM preparation task time |
| 2007 | Safety | Technology | Technology Improvement | Instrument Flight Procedure (IFP) production error rate |
| 2008 | Safety | Customer Results | Delivery Time | Number of days from request to publish for an Instrument Flight Procedure (IFP) |
| 2008 | Safety | Mission and Business Results | Air Transportation | Number of WAAS Instrument Flight Procedures published per year |
| 2008 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) development task time |
| 2008 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) amendment task time |
| 2008 | Safety | Processes and Activities | Efficiency | Obstacle Evaluation (OE) task time |
| 2008 | Safety | Processes and Activities | Efficiency | NOTAM preparation task time |
| 2008 | Safety | Technology | Technology Improvement | Instrument Flight Procedure (IFP) production error rate |
| 2009 | Safety | Customer Results | Delivery Time | Number of days from request to publish for an Instrument Flight Procedure (IFP) |
| 2009 | Safety | Mission and Business Results | Air Transportation | Number of WAAS Instrument Flight Procedures published per year. |
| 2009 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) development task time |
| 2009 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) amendment task time |
| 2009 | Safety | Processes and Activities | Efficiency | Obstacle Evaluation (OE) task time |
| 2009 | Safety | Processes and Activities | Efficiency | NOTAM preparation task time |
| 2009 | Safety | Technology | Technology Improvement | Instrument Flight Procedure (IFP) production error rate |
| 2010 | Safety | Customer Results | Delivery Time | Number of days from request to publish for an Instrument Flight Procedure (IFP) |
| 2010 | Safety | Mission and Business Results | Air Transportation | Number of WAAS Instrument Flight Procedures published |
| 2010 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) development task time |
| 2010 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) amendment task time |
| 2010 | Safety | Processes and Activities | Efficiency | Obstacle Evaluation (OE) task time |
| 2010 | Safety | Processes and Activities | Efficiency | NOTAM preparation task time |
| 2010 | Safety | Technology | Technology Improvement | Instrument Flight Procedure (IFP) production error rate |
| 2011 | Safety | Customer Results | Delivery Time | Number of days from request to publish for an Instrument Flight Procedure (IFP) |
| 2011 | Safety | Mission and Business Results | Air Transportation | Number of WAAS Instrument Flight Procedures published |
| 2011 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) development task time |
| 2011 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) amendment task time |
| 2011 | Safety | Processes and Activities | Efficiency | Obstacle Evaluation (OE) task time |
| 2011 | Safety | Processes and Activities | Efficiency | NOTAM preparation task time |
| 2011 | Safety | Technology | Technology Improvement | Instrument Flight Procedure (IFP) production error rate |
| 2012 | Safety | Customer Results | Delivery Time | Number of days from request to publish for an Instrument Flight Procedure (IFP) |
| 2012 | Safety | Mission and Business Results | Air Transportation | Number of WAAS Instrument Flight Procedures published |
| 2012 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) development task time |
| 2012 | Safety | Processes and Activities | Efficiency | Instrument Flight Procedure (IFP) amendment task time |
| 2012 | Safety | Processes and Activities | Efficiency | Obstacle Evaluation (OE) task time |

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|---|---|---|---|---|
| 2012 | Safety | Processes and Activities | Efficiency | NOTAM preparation task time |
| 2012 | Safety | Technology | Technology Improvement | Instrument Flight Procedure (IFP) production error rate |

## 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.**

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| I.F.1. Is this investment included in your agency's target enterprise architecture? | yes |
| I.F.1.a. If "no," please explain why?<br>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.<br>Description: (Up to 500 characters) | [A14.02-01] Instrument Flight Procedures Automation (IFPA) |
| I.F.2.b. If "no," please explain why?<br>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.<br>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.

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) |
|---|---|---|---|---|
| Flight Plan Support | Flight plan support provides NAS users essential weather and aeronautical information. Flight planning requires such information as expected route, altitude, time of flight, available navigation systems, available routes, special use airspace (SUA) restrictions, daily demand conditions, and anticipated flight conditions, including weather and sky conditions (e.g., volcanic ash, smoke, or birds). (NAS - Air Traffic Services: Flight Planning) | Customer Relationship Management | Product Management | |
| Airspace Design | Airspace design criteria establish the conditions for designing structures in the airspace to support safety of flight and efficient flow of traffic. Design criteria include the standards and guidelines for establishing classes of airspace, designation of volumes of airspace for the provision of separation (sectors, special use, etc.), | Customer Relationship Management | Product Management | |

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| | waypoints, published routes etc. (NAS - Air Traffic Services: Airspace Management) | | | |
| Airborne Guidance | NAS provides signals in space through space-based mechanisms and ground based aids for point-in-space navigation through a variety of operating environments. These environments include structured routes, random routings and transitions. Guidance is provided for position determination in both vertical and lateral planes in all phases of flight. Visual NAVAIDS provide approach and landing guidance to aircraft in addition to electronic type NAVAIDS.(NAS - Air Traffic Services: Airspace Management) | Customer Relationship Management | Product Management | |
| Flight Plan Support | Flight plan support provides NAS users essential weather and aeronautical information. Flight planning requires such information as expected route, altitude, time of flight, available navigation systems, available routes, special use airspace (SUA) restrictions, daily demand conditions, and anticipated flight conditions, including weather and sky conditions (e.g., volcanic ash, smoke, or birds). (NAS - Air Traffic Services: Flight Planning) | Tracking and Workflow | Process Tracking | |
| Airspace Design | Airspace design criteria establish the conditions for designing structures in the airspace to support safety of flight and efficient flow of traffic. Design criteria include the standards and guidelines for establishing classes of airspace, designation of volumes of airspace for the provision of separation (sectors, special use, etc.), waypoints, published routes etc. (NAS - Air Traffic Services: Airspace Management) | Tracking and Workflow | Process Tracking | |
| Airborne Guidance | NAS provides signals in space through space-based mechanisms and ground based aids for point-in-space navigation through a variety of operating environments. These environments include structured routes, random routings and transitions. Guidance is provided for position determination in both vertical and lateral planes in all phases of flight. Visual NAVAIDS provide approach and landing guidance to aircraft in addition to electronic type NAVAIDS. (NAS - Air Traffic Services: Airspace Management) | Tracking and Workflow | Process Tracking | |
| Flight Plan Support | Flight plan support provides NAS users essential weather and aeronautical information. Flight planning requires such information as expected route, altitude, time of flight, available navigation systems, available routes, special use airspace (SUA) restrictions, daily demand conditions, and anticipated flight conditions, | Data Management | Data Exchange | |

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|---|---|---|---|---|
| | including weather and sky conditions (e.g., volcanic ash, smoke, or birds). (NAS - Air Traffic Services: Flight Planning) | | | |
| Airspace Design | Airspace design criteria establish the conditions for designing structures in the airspace to support safety of flight and efficient flow of traffic. Design criteria include the standards and guidelines for establishing classes of airspace, designation of volumes of airspace for the provision of separation (sectors, special use, etc.), waypoints, published routes etc. (NAS - Air Traffic Services: Airspace Management) | Data Management | Data Exchange | |
| Airborne Guidance | NAS provides signals in space through space-based mechanisms and ground based aids for point-in-space navigation through a variety of operating environments. These environments include structured routes, random routings and transitions. Guidance is provided for position determination in both vertical and lateral planes in all phases of flight. Visual NAVAIDS provide approach and landing guidance to aircraft in addition to electronic type NAVAIDS. (NAS - Air Traffic Services: Airspace Management) | Data Management | Data Exchange | |
| Flight Plan Support | Flight plan support provides NAS users essential weather and aeronautical information. Flight planning requires such information as expected route, altitude, time of flight, available navigation systems, available routes, special use airspace (SUA) restrictions, daily demand conditions, and anticipated flight conditions, including weather and sky conditions (e.g., volcanic ash, smoke, or birds). (NAS - Air Traffic Services: Flight Planning) | Development and Integration | Software Development | |
| Airspace Design | Airspace design criteria establish the conditions for designing structures in the airspace to support safety of flight and efficient flow of traffic. Design criteria include the standards and guidelines for establishing classes of airspace, designation of volumes of airspace for the provision of separation (sectors, special use, etc.), waypoints, published routes etc. (NAS - Air Traffic Services: Airspace Management) | Development and Integration | Software Development | |
| Airborne Guidance | NAS provides signals in space through space-based mechanisms and ground based aids for point-in-space navigation through a variety of operating environments. These environments include structured routes, random routings and transitions. Guidance is provided for position determination in both vertical and lateral planes in all phases of flight. Visual | Development and Integration | Software Development | |

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| | NAVAIDS provide approach and landing guidance to aircraft in addition to electronic type NAVAIDS. (NAS - Air Traffic Services: Airspace Management) | | | |

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) |
|---|---|---|---|---|
| Software Development | Component Framework | Business Logic | Platform Independent Technologies | Oracle - Enterprise Java Beans (EJB), Java Servlet, Java, C++ |
| Software Development | Component Framework | Data Management | Database Connectivity | Sun Microsystems - JAVA Database Connectivity (JDBC) |
| Software Development | Component Framework | Data Interchange | Data Exchange | Vendor Independent - Simple Object Access Protocol (SOAP), Web Services User Interface (WSUI) |
| Software Development | Component Framework | Security | Supporting Security Services | Oracle - Web Services Manager (formerly Oblix COREsv) |
| Data Exchange | Service Interface and Integration | Interoperability | Data Types / Validation | Vendor Independent - XML Schema, Document Type Definition (DTD) |
| Data Exchange | Service Interface and Integration | Interoperability | Data Transformation | Vendor independent - eXtensible Stylesheet Language Transform (XSLT) |
| Data Exchange | Service Interface and Integration | Interoperability | Data Format / Classification | Vendor independent - eXtensible Markup Language (XML); Altova - XML Spy Suite |
| Product Management | Service Access and Delivery | Service Transport | Service Transport | Vendor independent - TCP/IP, HTTP, HTTPS, FTP |
| Product Management | Service Access and Delivery | Service Transport | Supporting Network Services | Vendor independent - LDAP, DHCP, DNS |
| Software Development | Service Interface and Integration | Integration | Enterprise Application Integration | Oracle-Application Connectivity, Transformation and Formatting |
| Product Management | Service Access and Delivery | Access Channels | Web Browser | Microsoft Internet Explorer |
| Product Management | Service Access and Delivery | Access Channels | Other Electronic Channels | Vendor independent - Web Services, Uniform Resource Locator (URL) |
| Product Management | Service Access and Delivery | Delivery Channels | Intranet | Apache Web Server |
| Product Management | Service Platform and Infrastructure | Delivery Servers | Application Servers | Oracle Application Server |
| Software Development | Service Platform and Infrastructure | Software Engineering | Software Configuration Management | IBM Rational-ClearQuest for Change Control, Concurrent Versioning System (CVS) for version control. |
| Software Development | Service Platform and Infrastructure | Software Engineering | Modeling | Irwin Data Modeler; Vendor independent - Unified Modeling Language (UML) |
| Product Management | Service Platform and Infrastructure | Support Platforms | Independent Platform | Vendor independent - Java 2 Enterprise Edition (J2EE) |
| Product Management | Service Platform and Infrastructure | Hardware / Infrastructure | Network Devices / Standards | Hub, Switch, Router, Firewall |
| Software Development | Component Framework | Security | Certificates / Digital Signatures | Oracle-Digital Certificate Authentication, COREid Access & Identity |
| Product Management | Service Access and Delivery | Service Requirements | Hosting | Sun Microsystems |
| Product Management | Service Access and Delivery | Service Requirements | Authentication / Single Sign-on | Oracle-COREid Access & Identity; Sun Microsystems-Lightweight Directory Access Protocol (LDAP) |
| Product Management | Service Access and Delivery | Service Requirements | Legislative / Compliance | Information and Access Security |
| Product Management | Service Platform and Infrastructure | Database / Storage | Database | Oracle 10g (geo-spatial) |

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| Product Management | Service Platform and Infrastructure | Database / Storage | Storage | Vendor independent - Storage Area Network, Replication |
| Product Management | Service Platform and Infrastructure | Delivery Servers | Web Servers | Apache Web Servers |
| Software Development | Service Platform and Infrastructure | Software Engineering | Integrated Development Environment | Borland - J-Builder; Vendor independent - Eclipse |
| Software Development | Service Platform and Infrastructure | Software Engineering | Test Management | Borland - J-Builder; Vendor independent - Eclipse |
| Product Management | Service Platform and Infrastructure | Hardware / Infrastructure | Servers / Computers | Sun Microsystems Enterprise Server |
| Product Management | Service Platform and Infrastructure | Hardware / Infrastructure | Embedded Technology Devices | Redundant Array of Independent Disks (RAID) |
| Product Management | Service Platform and Infrastructure | Hardware / Infrastructure | Peripherals | Printers - Xerox, HP |
| Product Management | Service Platform and Infrastructure | Hardware / Infrastructure | Wide Area Network (WAN) | Frame Relay, ATM |
| Product Management | Service Platform and Infrastructure | Hardware / Infrastructure | Local Area Network (LAN) | Ethernet |
| Software Development | Component Framework | User Presentation / Interface | Dynamic Server-Side Display | Sun Microsystems-JAVA Server Pages (JSP); Microsoft-Internet Explorer |
| Software Development | Component Framework | User Presentation / Interface | Content Rendering | Vendor Independent - Cascading Style Sheets (CSS) |
| Software Development | Service Interface and Integration | Interface | Service Description / Interface | Vendor Independent - Web Services Description Language (WSDL) |
| Software Development | Service Interface and Integration | Interface | Service Discovery | Systinet Registry - Universal Description, Discovery, and Integration (UDDI) |
| Process Tracking | Service Platform and Infrastructure | Support Platforms | Independent Platform | TBD |

| | |
|---|---|
| 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.<br>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<br>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: | |