

Exhibit 300 FY2010

FAAXX712: Next Generation Air Transportation System (NextGen)

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:	2008-09-08
I.A.2. Agency:	021
I.A.3. Bureau:	12
I.A.4. Name of this Capital Asset: Description: (Up to 250 characters)	FAAXX712: Next Generation Air Transportation System (NextGen)
I.A.5. Unique Project (Investment) Identifier: Description: For IT investment only, see section 53. For all other, use agency ID system.	021-12-01-14-01-1020-00
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.	Multi-Agency Collaboration
I.A.8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap: Description: (Up to 2500 characters)	<p>Today's air traffic control system relies on ground-based communications, navigation and surveillance services that can no longer be scaled upward to handle growing demand. NextGen, led by the FAA, is the federal government's response to this challenge, which calls for fundamental changes in the concepts, systems, technologies, roles and responsibilities guiding the nation's air traffic system. The complex network that is the U.S. air transportation system requires a comprehensive set of services able to deliver benefits along several fronts. The NextGen central performance metric is NAS capacity that can be utilized without taking the system and its users beyond a specified degree of tolerable delay, or in other words feasible throughput. Without new capacity enabled by NextGen transformation, the NAS will soon be unable to serve anticipated demand without imposing unacceptably high levels of delay and congestion on users. NextGen's closing of this performance gap has been analyzed using NAS simulation tools that estimate system throughput and delay under alternative performance scenarios. NAS users, especially scheduled services, require reliable ATM services in a broad range of weather conditions. Capacity enhancements must therefore be effective in all but the most severe of weather conditions if the system is to remain robust. NextGen information management and decision support tools can improve system capacity specifically in convective or other inclement weather conditions. Providing new capacity is not in itself sufficient to close NAS performance gaps. There are requirements in other areas that must simultaneously be met. Foremost among these is safety. Despite forecasted growth, aircraft and air traffic operations should maintain their current low accident and fatality rates across the system. This can be planned through modeling, analysis and mitigation of anticipated safety hazards. Satisfying environmental requirements is another challenge for continued aviation system growth, and JPDO research, tools and procedures will enable continued growth that does not impose unacceptable costs on the natural environment. A third essential feature of successful capacity growth is the security of the future system, which will be achieved through collaboration with DHS toward deploying a layered and adaptive security approach that is integrated with NextGen.</p>
I.A.9. Did the Agency's Executive/Investment Committee approve this request?	yes
I.A.9.a. If "yes," what was the date of this approval?	2008-07-25
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)	yes
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?	yes
I.A.13.a. If "yes," select all that apply:	R and D Investment Criteria
I.A.13.b. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-Gov is selected, is it an approved shared service provider or the managing partner?) Description: (Up to 500 characters)	
I.A.14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? Description: (For more information about the PART, visit www.whitehouse.gov/omb/part .)	yes
I.A.14.a. If "yes," does this investment address a weakness found during a PART review?	yes
I.A.14.b. If "yes," what is the name of the PARTed program?	10001121 - FAA Air Traffic Services
I.A.14.c. If "yes," what rating did the PART receive?	Adequate
I.A.15. Is this investment for information technology?	yes
I.A.16 What is the level of the IT Project? (per CIO Council PM Guidance) Description: Level 1 - Projects with low-to-moderate complexity and risk. Example: Bureau-level project such as a stand-alone information system that has low- to-moderate complexity and risk. Level 2 - Projects with high complexity and/or risk which are critical to the mission of the organization. Examples: Projects that are part of a portfolio of projects/systems that impact each other and/or impact mission activities. Department-wide projects that impact cross-organizational missions, such as an agency-wide system integration that includes large scale Enterprise Resource Planning (e.g., the DoD Business Mgmt Modernization Program). Level 3 - Projects that have high complexity, and/or risk, and have government-wide impact. Examples: Government-wide initiative (E-GOV, President's Management Agenda). High interest projects with Congress, GAO, OMB, or the general public. Cross-cutting initiative (Homeland Security).	Level 3
I.A.17. In addition to the answer in 1.A.11.d, what project management qualifications does the Project Manager have? (per CIO Council PM Guidance)	(5) No Project manager has yet been assigned to 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)	yes
I.A.19. Is this a financial management system?	no
I.A.19.a. If "yes," does this investment address a FFIA compliance area?	
I.A.19.a.1. If "yes," which compliance area: Description: (Up to 250 characters)	
I.A.19.a.2. If "no," what does it address? Description: (Up to 500 characters)	
I.A.19.b. If "yes," please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A-11 section 52 Description: (Up to 2500 characters)	
I.A.20. What is the percentage breakout for the total FY2010 funding request for the following? Description: (This should total 100%)	
I.A.20.a. Hardware	80
I.A.20.b. Software	10
I.A.20.c. Services	5
I.A.20.d. Other	5
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	\$34.400	\$93.960	\$293.700	\$375.600
Acquisition	\$90.000	\$109.400	\$336.300	\$331.800
Subtotal Planning and Acquisition	\$124.400	\$203.360	\$630.000	\$707.400
Operations and Maintenance	\$1.600	\$1.900	\$2.900	\$4.600
TOTAL	\$126.000	\$205.260	\$632.900	\$712.000
Government FTE Costs	\$10.000	\$14.374	\$14.874	\$14.588

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	72	96	92	86

I.B.2. Will this project require the agency to hire additional FTE's?	yes
I.B.2.a. If "yes," How many and in what year? Description: (Up to 500 characters)	NextGen is in the planning stage. It is premature to estimate the FTEs required to support NextGen. Subsequent Exhibit 300s will include more comprehensive estimates.
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 table represents the best information for FAA NextGen programs available at this time. The FY2010 column is the current services budget information.

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
2009	Environmental Stewardship	Customer Results	Accuracy of Service or Product Delivered	Projected percent reduction in number of people exposed to >65 dB DNL
2009	Reduced Congestion	Mission and Business Results	Air Transportation	Projected percent on-time arrivals with traffic volume scaled to meet demand (up to 3X current volume)
2009	Reduced Congestion	Technology	Accessibility	(ADS-B Program Measure) Expansion of Broadcast Services: % of GA NAS-wide operations inside FIS-B and TIS-B coverage areas
2010	Environmental Stewardship	Customer Results	Accuracy of Service or Product Delivered	Projected percent reduction in number of people exposed to >65 dB DNL
2010	Reduced Congestion	Mission and Business Results	Air Transportation	Projected percent on-time arrivals with traffic volume scaled to meet demand (up to 3X current volume)
2011	Environmental Stewardship	Customer Results	Accuracy of Service or Product Delivered	Projected percent reduction in number of people exposed to >65 dB DNL
2011	Reduced Congestion	Mission and Business Results	Air Transportation	Projected percent on-time arrivals with traffic volume scaled to meet demand (up to 3X current volume)
2012	Environmental Stewardship	Customer Results	Accuracy of Service or Product Delivered	Projected percent reduction in number of people exposed to >65 dB DNL
2012	Reduced Congestion	Mission and Business Results	Air Transportation	Projected percent on-time arrivals with traffic volume scaled to meet demand (up to 3X current volume)
2013	Environmental Stewardship	Customer Results	Accuracy of Service or Product Delivered	Projected percent reduction in number of people exposed to >65 dB DNL
2013	Reduced Congestion	Mission and Business Results	Air Transportation	Projected percent on-time arrivals with traffic volume scaled to meet demand (up to 3X current volume)
2013	Reduced Congestion	Processes and Activities	Cycle Time	Projected percent reduction of average curb-to-curb travel time

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

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

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

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

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

- 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)
Aircraft-to-Aircraft Separation (ATC-Separation Assurance):	Aircraft are separated from other known aircraft in the terminal, en route, and oceanic environments. Separation assurance involves the application of separation standards to ensure aircraft remain an appropriate minimum distance or altitude from other known aircraft. Standards are defined for aircraft based on aircraft type, size, equipment, and for operating in different environments. (NAS ATC-Separation Assurance):	Visualization	Mapping / Geospatial / Elevation / GPS	
Aircraft-Terrain-Obstacles (ATC-Separation Assurance)	Aircraft are separated from terrain and obstacles using published safety zones and processing position and intent information. Aircraft positions are derived from navigational systems, surveillance information, visual orientation, and position reports to ensure an aircraft's trajectory maintains a minimum safe distance from ground, mountainous terrain, and man-made obstacles. (NAS ATC-Separation Assurance)	Visualization	Mapping / Geospatial / Elevation / GPS	
Traffic Advisory (ATC-Advisory Services)	Traffic advisories are provided to alert	Visualization	Mapping / Geospatial / Elevation / GPS	

	aircraft to potential conflicts with others on the surface or in-flight. For example, traffic advisories are provided to aircraft or other flight objects that are in the proximity of hot air/gas balloons, missile launches, or other potential hazards. Traffic advisories for aircraft on the surface include the number, type, position, and intent of the ground traffic. (NAS ATC-Advisory Services)			
Weather Advisories Capability (ATC-Advisory Services)	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. (NAS ATC-Advisory Services)	Visualization	Mapping / Geospatial / Elevation / GPS	
TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Knowledge Management	Information Sharing	
ATC Advisory - NAS Status Advisory	Information about NAS status that has changed or was not readily available during flight planning is provided to in-flight aircraft. This includes updates concerning the operational status of airspace, airports, nav aids, in-flight or ground hazards, traffic management directives, and other information that is essential to the safety and efficiency of aircraft.	Knowledge Management	Information Sharing	
ATC Advisory - Weather Advisories Capability	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	
TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Knowledge Management	Knowledge Capture	
TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Knowledge Management	Knowledge Distribution and Delivery	
TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Data Management	Data Exchange	
TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Data Management	Meta Data Management	
TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Development and Integration	Enterprise Application Integration	

TM Strategic Flow - Flight Day Management	Flight day traffic management optimizes NAS traffic flow for the current 24-hour period. Demand profiles are compared with projections of NAS capacity for the current day and identify periods and locations where predicted demand exceeds predicted capacity. Specific responses to maximize efficiency are developed and implemented through collaboration across the NAS.	Development and Integration	Data Integration	
ATC Advisory - NAS Status Advisory	Information about NAS status that has changed or was not readily available during flight planning is provided to in-flight aircraft. This includes updates concerning the operational status of airspace, airports, nav aids, in-flight or ground hazards, traffic management directives, and other information that is essential to the safety and efficiency of aircraft.	Knowledge Management	Knowledge Distribution and Delivery	
ATC Advisory - NAS Status Advisory	Information about NAS status that has changed or was not readily available during flight planning is provided to in-flight aircraft. This includes updates concerning the operational status of airspace, airports, nav aids, in-flight or ground hazards, traffic management directives, and other information that is essential to the safety and efficiency of aircraft.	Development and Integration	Enterprise Application Integration	
ATC Advisory - NAS Status Advisory	Information about NAS status that has changed or was not readily available during flight planning is provided to in-flight aircraft. This includes updates concerning the operational status of airspace, airports, nav aids, in-flight or ground hazards, traffic management directives, and other information that is essential to the safety and efficiency of aircraft.	Development and Integration	Data Integration	
ATC Advisory - Weather Advisories Capability	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	Information Sharing	
ATC Advisory - Weather Advisories Capability	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 Advisories Capability	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.	Data Management	Data Exchange	
ATC Advisory - Weather Advisories Capability	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.	Data Management	Meta Data Management	
ATC Advisory - Weather Advisories Capability	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.	Development and Integration	Enterprise Application Integration	
ATC Advisory - Weather Advisories Capability	Weather information is available either automatically or manually through communication with ATC and other facilities. For example, pilots receive weather advisories from automated	Development and Integration	Data Integration	

	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.			
ATC Separation Assurance	The separation assurance service ensures that aircraft maintain a safe distance from other aircraft, terrain, obstacles, and certain airspace not designated for routine air travel. Separation assurance involves the application of separation standards to ensure safety. Standards are defined for aircraft operating in different environments.	Data Management	Data Exchange	
ATC-Advisory	Air traffic control and other facilities provide advice and information to assist pilots in the safe conduct of flight and aircraft movement. These advisories include providing weather information, traffic, and NAS status information to pilots, flight planners, and the general public. These advisories and information are either directed to a specific location or broadcast to any user in the area	Data Management	Data Exchange	
TM Synchronization	Traffic synchronization supports expeditious flight for the large number of aircraft using the NAS during any given period of time. NAS processes operate to maximize efficiency and capacity in response to weather, NAS infrastructure, runway availability or other conditions. Traffic synchronization is the tactical portion of traffic management providing sequencing, spacing, and routing of aircraft. Traffic synchronization activities are accomplished while maintaining separation assurance and impl	Routing and Scheduling	Inbound Correspondence Management	
TM Synchronization	Traffic synchronization supports expeditious flight for the large number of aircraft using the NAS during any given period of time. NAS processes operate to maximize efficiency and capacity in response to weather, NAS infrastructure, runway availability or other conditions. Traffic synchronization is the tactical portion of traffic management providing sequencing, spacing, and routing of aircraft. Traffic synchronization activities are accomplished while maintaining separation assurance and impl	Routing and Scheduling	Outbound Correspondence Management	
ATC Separation Assurance	The separation assurance service ensures that aircraft maintain a safe distance from other aircraft, terrain, obstacles, and certain airspace not designated for routine air travel. Separation assurance involves the application of separation standards to ensure safety. Standards are defined for aircraft operating in different environments.	Systems Management	Remote Systems Control	
Aircraft to Aircraft Separation Capability	Aircraft are separated from other known aircraft in the terminal, en route, and oceanic environments. Separation assurance involves the application of separation standards to ensure aircraft remain an appropriate minimum distance or altitude from other known aircraft. Standards are defined for aircraft based on aircraft type, size, equipment, and for operating in different environments. NAS: ATC Separation Assurance	Communication	Audio Conferencing	
Traffic Advisory	Traffic advisories are provided to alert aircraft to potential conflicts with others, on the surface or in-flight. For example, traffic advisories are provided to aircraft or other flight objects that are in the proximity of hot air/gas balloons, missile launches, or other potential hazards. Traffic advisories for aircraft on the surface include the number, type, position, and intent of the ground traffic. NAS: ATC Advisory	Communication	Audio Conferencing	
Aircraft to Aircraft Separation Capability	Aircraft are separated from other known aircraft in the terminal, en route, and oceanic environments. Separation assurance involves the application of separation standards to ensure aircraft remain an appropriate minimum distance or altitude from other known aircraft. Standards are defined for aircraft based on aircraft type, size, equipment, and for operating in different environments. NAS: ATC Separation Assurance	Communication	Computer / Telephony Integration	
Traffic Advisory	Traffic advisories are provided to alert aircraft to potential conflicts with others, on the surface or in-flight. For example, traffic advisories are provided to aircraft or other flight objects that are in the proximity of hot air/gas balloons, missile launches, or other potential hazards. Traffic advisories for aircraft on the surface include the number, type,	Communication	Computer / Telephony Integration	

Aircraft to Aircraft Separation Capability	position, and intent of the ground traffic. NAS: ATC Advisory Route, and oceanic environments. Separation assurance involves the application of separation standards to ensure aircraft remain an appropriate minimum distance or altitude from other known aircraft. Standards are defined for aircraft based on aircraft type, size, equipment, and for operating in different environments. NAS: ATC Separation Assurance	Communication	Voice Communications	
Traffic Advisory	Conflicts with others, on the surface or in-flight. For example, traffic advisories are provided to aircraft or other flight objects that are in the proximity of hot air/gas balloons, missile launches, or other potential hazards. Traffic advisories for aircraft on the surface include the number, type, position, and intent of the ground traffic. NAS: ATC Advisory	Communication	Voice Communications	

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)
Mapping / Geospatial / Elevation / GPS	Component Framework	Data Interchange	Data Exchange	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Component Framework	User Presentation / Interface	Content Rendering	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Access and Delivery	Access Channels	Other Electronic Channels	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Interface and Integration	Interoperability	Data Transformation	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Database / Storage	Database	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	ITT Corporation
Mapping / Geospatial / Elevation / GPS	Service Platform and Infrastructure	Software Engineering	Test Management	ITT Corporation
Information Sharing	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Information Sharing	Service Access and Delivery	Delivery Channels	Internet	TBD
Information Sharing	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Information Sharing	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Information Sharing	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Information Sharing	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Information Sharing	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Information Sharing	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Information Sharing	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Information Sharing	Service Interface and Integration	Integration	Middleware	TBD
Information Sharing	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Information Sharing	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Information Sharing	Service Interface and Integration	Interoperability	Data Transformation	TBD
Information Sharing	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Information Sharing	Service Interface and Integration	Interface	Service Description / Interface	TBD
Information Sharing	Service Interface and Integration	Interface	Service Discovery	TBD
Knowledge Capture	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Knowledge Capture	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Knowledge Capture	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Knowledge Capture	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Knowledge Capture	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Knowledge Capture	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Knowledge Capture	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Knowledge Capture	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Knowledge Capture	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Knowledge Capture	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Knowledge Capture	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Knowledge Capture	Service Interface and Integration	Integration	Middleware	TBD
Knowledge Capture	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Knowledge Capture	Service Interface and Integration	Interoperability	Data Transformation	TBD
Knowledge Capture	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Knowledge Capture	Service Interface and Integration	Interface	Service Description / Interface	TBD
Knowledge Capture	Service Interface and Integration	Interface	Service Discovery	TBD
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Knowledge Distribution and Delivery	Service Access and Delivery	Delivery Channels	Internet	TBD
Knowledge Distribution and Delivery	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Knowledge Distribution and Delivery	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Knowledge Distribution and Delivery	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Knowledge Distribution and Delivery	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Integration	Middleware	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Format / Classification	TBD

Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Transformation	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Interface	Service Description / Interface	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Interface	Service Discovery	TBD
Data Exchange	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Data Exchange	Service Access and Delivery	Delivery Channels	Internet	TBD
Data Exchange	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Data Exchange	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Data Exchange	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Data Exchange	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Data Exchange	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Data Exchange	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Data Exchange	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Data Exchange	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Data Exchange	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Data Exchange	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Data Exchange	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Data Exchange	Service Interface and Integration	Integration	Middleware	TBD
Data Exchange	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Data Exchange	Service Interface and Integration	Interoperability	Data Transformation	TBD
Data Exchange	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Data Exchange	Service Interface and Integration	Interface	Service Description / Interface	TBD
Data Exchange	Service Interface and Integration	Interface	Service Discovery	TBD
Meta Data Management	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Meta Data Management	Service Access and Delivery	Delivery Channels	Internet	TBD
Meta Data Management	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Meta Data Management	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Meta Data Management	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Meta Data Management	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Meta Data Management	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Meta Data Management	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Meta Data Management	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Meta Data Management	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Meta Data Management	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Meta Data Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Meta Data Management	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Meta Data Management	Service Interface and Integration	Integration	Middleware	TBD
Meta Data Management	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Meta Data Management	Service Interface and Integration	Interoperability	Data Transformation	TBD
Meta Data Management	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Meta Data Management	Service Interface and Integration	Interface	Service Description / Interface	TBD
Meta Data Management	Service Interface and Integration	Interface	Service Discovery	TBD
Enterprise Application Integration	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Enterprise Application Integration	Service Access and Delivery	Delivery Channels	Internet	TBD
Enterprise Application Integration	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Knowledge Capture	Service Access and Delivery	Delivery Channels	Internet	TBD
Enterprise Application Integration	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Enterprise Application Integration	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Enterprise Application Integration	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Enterprise Application Integration	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Enterprise Application Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Enterprise Application Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Enterprise Application Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Enterprise Application Integration	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Enterprise Application Integration	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Enterprise Application Integration	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Enterprise Application Integration	Service Interface and Integration	Integration	Middleware	TBD
Enterprise Application Integration	Service Interface and Integration	Interface	Service Description / Interface	TBD
Enterprise Application Integration	Service Interface and Integration	Interface	Service Discovery	TBD
Enterprise Application Integration	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Enterprise Application Integration	Service Interface and Integration	Interoperability	Data Transformation	TBD
Enterprise Application Integration	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Data Integration	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Data Integration	Service Access and Delivery	Delivery Channels	Internet	TBD
Data Integration	Service Access and Delivery	Delivery Channels	Peer to Peer (P2P)	TBD
Data Integration	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)	TBD
Data Integration	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	TBD
Data Integration	Service Access and Delivery	Service Transport	Supporting Network Services	TBD
Data Integration	Service Platform and Infrastructure	Support Platforms	Independent Platform	TBD
Data Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	TBD
Data Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Data Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	TBD
Data Integration	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment	TBD
Data Integration	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	TBD
Data Integration	Service Interface and Integration	Integration	Enterprise Application Integration	TBD
Data Integration	Service Interface and Integration	Integration	Middleware	TBD
Data Integration	Service Interface and Integration	Interface	Service Description / Interface	TBD
Data Integration	Service Interface and Integration	Interface	Service Discovery	TBD
Data Integration	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Data Integration	Service Interface and Integration	Interoperability	Data Transformation	TBD
Data Integration	Service Interface and Integration	Interoperability	Data Types / Validation	TBD
Information Sharing	Component Framework	Business Logic	Platform Independent Technologies	TBD
Knowledge Capture	Component Framework	Business Logic	Platform Independent Technologies	TBD
Knowledge Distribution and Delivery	Component Framework	Business Logic	Platform Independent Technologies	TBD
Data Exchange	Component Framework	Business Logic	Platform Independent Technologies	TBD
Meta Data Management	Component Framework	Business Logic	Platform Independent Technologies	TBD
Enterprise Application Integration	Component Framework	Business Logic	Platform Independent Technologies	TBD
Data Integration	Component Framework	Business Logic	Platform Independent Technologies	TBD
Information Sharing	Component Framework	Data Interchange	Data Exchange	TBD
Knowledge Capture	Component Framework	Data Interchange	Data Exchange	TBD
Knowledge Distribution and Delivery	Component Framework	Data Interchange	Data Exchange	TBD
Data Exchange	Component Framework	Data Interchange	Data Exchange	TBD

Meta Data Management	Component Framework	Data Interchange	Data Exchange	TBD
Enterprise Application Integration	Component Framework	Data Interchange	Data Exchange	TBD
Data Integration	Component Framework	Data Interchange	Data Exchange	TBD
Information Sharing	Component Framework	Data Management	Reporting and Analysis	TBD
Knowledge Capture	Component Framework	Data Management	Reporting and Analysis	TBD
Knowledge Distribution and Delivery	Component Framework	Data Management	Reporting and Analysis	TBD
Data Exchange	Component Framework	Data Management	Reporting and Analysis	TBD
Meta Data Management	Component Framework	Data Management	Reporting and Analysis	TBD
Enterprise Application Integration	Component Framework	Data Management	Reporting and Analysis	TBD
Data Integration	Component Framework	Data Management	Reporting and Analysis	TBD
Data Exchange	Component Framework	Data Interchange	Data Exchange	TBD
Remote Systems Control	Component Framework	Data Interchange	Data Exchange	TBD
Inbound Correspondence Management	Component Framework	Data Interchange	Data Exchange	TBD
Outbound Correspondence Management	Component Framework	Data Interchange	Data Exchange	TBD
Data Exchange	Service Access and Delivery	Access Channels	Other Electronic Channels	TBD
Remote Systems Control	Service Access and Delivery	Access Channels	Other Electronic Channels	TBD
Inbound Correspondence Management	Service Access and Delivery	Access Channels	Other Electronic Channels	TBD
Outbound Correspondence Management	Service Access and Delivery	Access Channels	Other Electronic Channels	TBD
Data Exchange	Service Access and Delivery	Service Transport	Service Transport	TBD
Remote Systems Control	Service Access and Delivery	Service Transport	Service Transport	TBD
Inbound Correspondence Management	Service Access and Delivery	Service Transport	Service Transport	TBD
Outbound Correspondence Management	Service Access and Delivery	Service Transport	Service Transport	TBD
Voice Communications	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Computer / Telephony Integration	Service Access and Delivery	Access Channels	Collaboration / Communications	TBD
Audio Conferencing	Service Access and Delivery	Access Channels	Other Electronic Channels	TBD
Audio Conferencing	Service Access and Delivery	Delivery Channels	Intranet	TBD
Audio Conferencing	Service Interface and Integration	Interface	Service Description / Interface	TBD
Audio Conferencing	Service Platform and Infrastructure	Delivery Servers	Application Servers	TBD
Audio Conferencing	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	TBD

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

I.F.6.a. If "yes," please describe.
Description: (Up to 2500 characters) NextGen will leverage or build upon many existing components and applications that are now used for air traffic control and management. Since NextGen is in the planning stage, these components will be further specified as the SRM matures.

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.

Partner Agency	Joint exhibit approval date
006	
007	
024	
026	
021	

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

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? Legacy Investment

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

Name of the Legacy Investment of Systems	UPI if available	Date of the System Retirement
ASDE-3/AMASS		2020-09-30
ASDE-X (SMR portion)	021-12-01-20-01-1040-00	2020-09-30
ASR-11 (SSR portion)	021-12-01-20-01-1160-00	2024-09-30
ATCBI-4/5		2024-09-30
Mode-S (partial retirement)	021-12-01-20-02-3020-00	2024-09-30
ETVS	021-12-01-15-02-3180-00	2013-06-15
GSA 400		2010-06-15
GSA466		2010-06-15
ICSS Type 1		2013-06-15
ICSS Type 1A		2014-06-15
ICSS Type 2		2014-06-15
ICSS Type 3 (Denro)		2012-06-15
ICSS Type 3 (Litton)		2012-06-15
IVSR	021-12-01-15-02-3180-00	2017-06-15
RDVS 1 (Denro)	021-12-01-15-02-3180-00	2014-06-15
RDVS 1 (Litton)	021-12-01-15-02-3180-00	2014-06-15
RDVS 2 (Denro)	021-12-01-15-02-3180-00	2015-06-15

RDVS 2 (Litton)	021-12-01-15-02-3180-00	2015-06-15
RDVS 2A	021-12-01-15-02-3180-00	2015-06-15
STVS	021-12-01-15-02-3180-00	2017-06-15
VSCS	021-12-01-14-01-1060-00	2020-06-15