Exhibit 300: Capital Asset Plan and Business Case Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview (All Capital Assets)

1. Date of Submission:	
2. Agency:	Department of Commerce
3. Bureau:	National Oceanic And Atmospheric Administration
4. Name of this Capital Asset:	NOAA/NWS CS/ Advanced Weather Interactive Processing System (AWIPS)
5. Unique Project (Investment) Identifier: (For IT investment only, see section 53. For all other, use agency ID system.)	006-48-01-12-01-3101-00
6. What kind of investment will this be in FY 2010? (Please NOTE: Investments moving to O&M in FY 2010, with Planning/Acquisition activities prior to FY 2010 should not select O&M. These investments should indicate their current status.)	Mixed Life Cycle
7. What was the first budget year this investment was submitted to OMB?	FY2001 or earlier

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:

The Advanced Weather Interactive Processing System (AWIPS) is the cornerstone of a modernized National Weather Service (NWS). AWIPS hardware and software was deployed to Weather Forecast Offices (WFOs), River Forecast Centers (RFCs), and other NWS sites throughout the United States from 1996 to 1999. The system has been in its Operations and Maintenance phase of its lifecycle since 1999, and is critical to the National Weather Service's mission related to the preservation of life and property from severe weather and flooding events, and the enhancement of the national economy. AWIPS O&M funding is at approximately $38.0 million per year. AWIPS is in the O&M phase of its lifecycle, but contains a PAC funded Continuous Technology Refresh (CTR) product improvement plan that includes the Linux Migration Project to increase processing capacity and a project to restructure the AWIPS software into a Service Oriented Architecture (SOA). AWIPS PAC funds will be used to continue to infuse new science and technology into the AWIPS system. This technology infusion consists of separate projects that address three different areas of the AWIPS infrastructure: hardware, communications, and software. The hardware enhancements converted the original (dated) Hewlett-Packard Unix hardware to Linux based hardware to provide increased processing and mass storage capacity, and then continuously refresh the hardware on a cyclical basis; the communications enhancements increase satellite network bandwidth; and the software enhancement will re-engineer the AWIPS software suite into a standard Service Oriented Architecture making it easier and less expensive to integrate improved science and algorithms into AWIPS, while reducing software O&M costs. This AWIPS Product Improvement (API) strategy is designed to increase system performance while reducing maintenance costs and processing latency. AWIPS collects, communicates, processes, displays, and analyzes hydro-meteorological data that is fundamental to the conduct of the NWS mission. Technology infusion is essential for the future of AWIPS. Technology infusion will allow AWIPS to accommodate the high volume, fine-scale data that are available from advanced satellite sensors, new radars, and other ground based automated observing systems, and advanced numerical weather prediction models. It will enable improved weather warning and forecast services and provide critical support to the agency in meeting its GPRA goal.

9. Did the Agency's Executive/Investment Committee approve this request?	Yes
a. If "yes," what was the date of this approval?	6/15/2007
10. Did the Project Manager review this Exhibit?	Yes
a. What is the current FAC-P/PM (for civilian agencies) or DAWIA (for defense agencies) certification level of the program/project manager?	Waiver Issued
b. When was the Program/Project Manager Assigned?	3/1/2009
c. What date did the Program/Project Manager receive the FAC-P/PM certification? If the certification has not been issued, what is the anticipated date for certification?	3/1/2010
12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project?	Yes
a. Will this investment include electronic assets (including computers)?	Yes

b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	No
1. If "yes," is an ESPC or UESC being used to help fund this investment?	
2. If "yes," will this investment meet sustainable design principles?	
3. If "yes," is it designed to be 30% more energy efficient than relevant code?	
13. Does this investment directly support one of the PMA initiatives?	Yes
If "yes," check all that apply:	Competitive Sourcing Expanded E-Government Budget Performance Integration
a. 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?)	This investment supports Expanded Electronic Government (E-Gov) through direct applicability to the Disaster Management PMA E-Gov Initiative related to the HazCollect and All Hazards (Weather) Radio projects and the AWIPS Wide Area Network (WAN) and NOAAPort are important data sources for NWS web farms, which are accessible through www.firstgov.gov. AWIPS supports the PMA Budget Performance Integration initiative because PAC investments are closely tied to GPRA performance measures.
14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit www.whitehouse.gov/omb/part.)	Yes
a. If "yes," does this investment address a weakness found during a PART review?	No
b. If "yes," what is the name of the PARTed program?	
c. If "yes," what rating did the PART receive?	Moderately Effective
15. Is this investment for information technology?	Yes

If the answer to Question 15 is "Yes," complete questions 16-23 below. If the answer is "No," do not answer questions 16-23.

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Guidance)	Level 3
17. In addition to the answer in 11(a), 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
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
19. Is this a financial management system?	No
a. If "yes," does this investment address a FFMIA compliance area?	
1. If "yes," which compliance area:	
2. If "no," what does it address?	

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

20. What is the percentage breakout for the total FY2010 funding request for the following? (This should total 100%)

Hardware	45
Software	25
Services	16
Other	14
21. If this project produces information dissemination	N/A

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?

23. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? No

Question 24 must be answered by all Investments:

24. Does this investment directly support one of the GAO High Risk Areas? No

Section B: Summary of Spending (All Capital Assets)

1. 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.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS)
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 and earlier	PY 2008	CY 2009	BY 2010					
Planning:	0	0	0	0					
Acquisition:	89.514	10.323	16.859	10.482					
Subtotal Planning & Acquisition:	89.514	10.323	16.859	10.482					
Operations & Maintenance:	214.41	32.373	33.46	33.299					
TOTAL:	303.924	42.696	50.319	43.781					
Government FTE Costs should not be included in the amounts provided above.									
Government FTE Costs	52.063	6.626	6.81	7.048					
Number of FTE represented by Costs:	294	49	49	49					

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.

2. Will this project require the agency to hire additional FTE's? No

a. If "yes," How many and in what year?

3. If the summary of spending has changed from the FY2009 President's budget request, briefly explain those changes:

Section C: Acquisition/Contract Strategy (All Capital Assets)

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

Contracts/Task Orders Table: * Costs in millions

Contract or Task Order Number	Type of Contract/ Task Order (In accordance with FAR Part 16)	Has the contract been awarded (Y/N)	If so what is the date of the award? If not, what is the planned award date?	Start date of Contract/ Task Order	End date of Contract/ Task Order	Total Value of Contract/ Task Order ($M)	Is this an Interagency Acquisition? (Y/N)	Is it performance based? (Y/N)	Competitively awarded? (Y/N)	What, if any, alternative financing option is being used? (ESPC, UESC, EUL, N/A)	Is EVM in the contract? (Y/N)	Does the contract include the required security & privacy clauses? (Y/N)	Name of CO	CO Contact information (phone/email)	Contracting Officer FAC-C or DAWIA Certification Level (Level 1, 2, 3, N/A)	If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? (Y/N)
DG133W05CQ1067	FFP/CPFF	Yes	8/17/2005	8/17/2005	8/16/2015	301.9	No	Yes	Yes	NA	Yes	Yes	Middleton, Anita	anita.r.middleton@noaa.gov	Level 2	

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

3. Do the contracts ensure Section 508 compliance?	Yes
a. Explain why not or how this is being done?	The Department of Commerce and NOAA Contracting Offices require the inclusion of Section 508 compliance language in the statement of work for all IT development service contracts. In order to procure all COTS equipment and software, requestors are required to include with their purchase order or file the Government purchase card invoices as well as the vendors statement of compliance (Voluntary Product Assessibility Template VPAT)).
4. Is there an acquisition plan which reflects the requirements of FAR Subpart 7.1 and has been approved in accordance with agency requirements?	Yes
a. If "yes," what is the date?	6/1/2004
1. Is it Current?	Yes
b. If "no," will an acquisition plan be developed?	
1. If "no," briefly explain why:	

Section D: Performance Information (All Capital Assets)

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 or qualitative 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.

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
2006	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Customer Results	Customer Benefit	Customer Satisfaction	Customer Satisfaction Surveys	80%	80%	90%
2006	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Mission and Business Results	Disaster Management	Disaster Monitoring and Prediction	Lead Time for Tornado Warnings	13 minutes	13 minutes	13 minutes
2006	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Processes and Activities	Cycle Time and Timeliness	Timeliness	Message Latency	60 seconds	60 seconds	27.1 seconds
2006	3.1 Advance	Technology	Efficiency	System	Workstation	116 seconds	116 seconds	31 seconds

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.			Response Time	Performance Ratings			
2007	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Customer Results	Customer Benefit	Customer Satisfaction	Customer Satisfaction Surveys	81%	83%	86%
2007	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Mission and Business Results	Disaster Management	Disaster Monitoring and Prediction	Lead Time for Tornado Warnings	13 minutes	13 minutes	13 minutes
2007	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Processes and Activities	Cycle Time and Timeliness	Timeliness	Message Latency	60 seconds	60 seconds	17.9 seconds
2007	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Technology	Efficiency	System Response Time	Workstation Performance Ratings	110 seconds	105 seconds	26.7 seconds
2008	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Customer Results	Customer Benefit	Customer Satisfaction	Customer Satisfaction Surveys	82%	84%	96%
2008	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Mission and Business Results	Disaster Management	Disaster Monitoring and Prediction	Storm-based Lead Time for Tornado Warnings	11 minutes	13 minutes	-
2008	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and	Processes and Activities	Cycle Time and Timeliness	Timeliness	Message Latency	60 seconds	60 seconds	-

Performance Information Table

Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	environmental needs.							
2008	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Technology	Efficiency	System Response Time	Workstation Performance Ratings	105 seconds	100 seconds	25.22 seconds
2009	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Customer Results	Customer Benefit	Customer Satisfaction	Customer Satisfaction Surveys	84%	86%	-
2009	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Mission and Business Results	Disaster Management	Disaster Monitoring and Prediction	Storm-based Lead Time for Tornado Warnings	12 minutes	13 minutes	-
2009	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Processes and Activities	Cycle Time and Timeliness	Timeliness	Message Latency	60 seconds	60 seconds	-
2009	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Technology	Efficiency	System Response Time	Workstation Performance Ratings	99.5 seconds	94 seconds	-
2010	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Customer Results	Customer Benefit	Customer Satisfaction	Customer Satisfaction Surveys	86%	87%	-
2010	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Mission and Business Results	Disaster Management	Disaster Monitoring and Prediction	Storm-based Lead Time for Tornado Warnings	12 minutes	13 minutes	-
2010	3.1 Advance understanding and predict changes in the Earth's	Processes and Activities	Cycle Time and Timeliness	Timeliness	Message Latency	60 seconds	60 seconds	-

Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results
	environment to meet America's economic, social, and environmental needs.							
2010	3.1 Advance understanding and predict changes in the Earth's environment to meet America's economic, social, and environmental needs.	Technology	Efficiency	System Response Time	Workstation Performance Ratings	94.6 seconds	92 seconds	-

Section E: Security and Privacy (IT Capital Assets only)

8. Planning & Operational Systems - Privacy Table:					
(a) Name of System	(b) Is this a new system? (Y/N)	(c) Is there at least one Privacy Impact Assessment (PIA) which covers this system? (Y/N)	(d) Internet Link or Explanation	(e) Is a System of Records Notice (SORN) required for this system? (Y/N)	(f) Internet Link or Explanation
AWIPS	Yes	No	No because the system does not contain, process, or transmit personal identifying information.	No	No. This is not a Privacy Act system of records.

Details for Text Options:
Column (d): If yes to (c), provide the link(s) to the publicly posted PIA(s) with which this system is associated. If no to (c), provide an explanation why the PIA has not been publicly posted or why the PIA has not been conducted.

Column (f): If yes to (e), provide the link(s) to where the current and up to date SORN(s) is published in the federal register. If no to (e), provide an explanation why the SORN has not been published or why there isn't a current and up to date SORN.

Note: Working links must be provided to specific documents not general privacy websites. Non-working links will be considered as a blank field.

Section F: Enterprise Architecture (EA) (IT Capital Assets only)

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.

1. Is this investment included in your agency's target enterprise architecture?	Yes
a. If "no," please explain why?	
2. Is this investment included in the agency's EA Transition Strategy?	Yes
a. If "yes," provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.	Weather & Water/Advanced Weather Interactive Processing System (AWIPS)
b. If "no," please explain why?	
3. Is this investment identified in a completed and approved segment architecture?	No
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.	275-000

4. Service Component Reference Model (SRM) Table:
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.

Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
WWW-LFW-EIP, WWW-STI-Capability G	NWSRFS-Defines the set of capabilities that support the representation of the interaction between real-world objects.	Business Analytical Services	Analysis and Statistics	Mathematical			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	D2D, GFE, LAMP, & NWSRFS-Defines the set of capabilities that support the foretelling of something in advance by the use of data.	Business Analytical Services	Analysis and Statistics	Mathematical			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	D2D, GFE, LAMP, & NWSRFS-Defines the set of capabilities that support the use of mathematical functions and algorithms for the analysis of data.	Business Analytical Services	Analysis and Statistics	Mathematical			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	NWSRFS-Defines the set of capabilities that support the use of data flow and data modeling diagrams for applying systematic analysis of data.	Business Analytical Services	Analysis and Statistics	Structural / Thermal			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	D2D, GFE, & NWSRFS-Defines the set of capabilities that support the presentation of information in the form of diagrams or tables.	Business Analytical Services	Visualization	CAD			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	D2D, GFE, & NWSRFS-Defines the set of capabilities that support the presentation of information in the form of diagrams or tables.	Business Analytical Services	Visualization	Graphing / Charting			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	D2D, GFE, & NWSRFS-Defines the set of capabilities that support the creation of film or electronic images from pictures, paper forms or graphics for static or dynamic use.	Business Analytical Services	Visualization	Imagery			No Reuse	10
WWW-LFW-EIP, WWW-STI-Capability G	D2D, GFE, & NWSRFS-Defines the set of capabilities that support the use of elevation, latitude, and longitude coordinates.	Business Analytical Services	Visualization	Mapping / Geospatial / Elevation / GPS			No Reuse	10
WWW-LFW-EIP, WWW-STI-	WAN, SBN-Defines the set	Support Services	Communication	Computer / Telephony			No Reuse	10

4. Service Component Reference Model (SRM) Table:
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.

Agency Component Name	Agency Component Description	FEA SRM Service Domain	FEA SRM Service Type	FEA SRM Component (a)	Service Component Reused Name (b)	Service Component Reused UPI (b)	Internal or External Reuse? (c)	BY Funding Percentage (d)
Capability G	of capabilities that support the connectivity between server hardware, software and telecommunications equipment into a single logical system.			Integration				
WWW-LFW-EIP, WWW-STI-Capability G	NCF, LDAD-Defines the set of capabilities that support the management of permissions for logging onto a computer or network.	Support Services	Security Management	Access Control			No Reuse	10

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 the column can, but are not required to, add up to 100%.

5. Technical Reference Model (TRM) Table:
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.

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)
Data Exchange	Component Framework	Data Interchange	Data Exchange	XML
Data Exchange	Component Framework	Data Management	Database Connectivity	Object Linking and Embedding/Database (OLE/DB)
Data Exchange	Component Framework	Data Management	Reporting and Analysis	XML for Analysis
Intrusion Prevention	Component Framework	Security	Certificates / Digital Signatures	Secure Sockets Layer (SSL)
Intrusion Prevention	Component Framework	Security	Supporting Security Services	Secure Shell (SSH)
Intrusion Prevention	Component Framework	Security	Supporting Security Services	Transport Layer Security (TLS)
Data Exchange	Component Framework	User Presentation / Interface	Dynamic Server-Side Display	Java Server Pages (JSP)
Data Exchange	Component Framework	User Presentation / Interface	Static Display	Hyper Text Markup Language (HTML)
Data Exchange	Service Access and Delivery	Access Channels	Collaboration / Communications	Facsimile (Fax)
Data Exchange	Service Access and Delivery	Access Channels	Other Electronic Channels	Uniform Resource Locator (URL)
Data Exchange	Service Access and Delivery	Access Channels	Other Electronic Channels	Web Service
Data Exchange	Service Access and Delivery	Access Channels	Web Browser	Netscape Communicator
Data Exchange	Service Access and Delivery	Delivery Channels	Intranet	AWIPS-based intranet
Access Control	Service Access and Delivery	Service Requirements	Legislative / Compliance	Section 508
Intrusion Prevention	Service Access and Delivery	Service Requirements	Legislative / Compliance	Security
Access Control	Service Access and Delivery	Service Requirements	Legislative / Compliance	Web Content Accessibility
Access Control	Service Access and Delivery	Service Transport	Service Transport	File Transfer Protocol (FTP)
Access Control	Service Access and Delivery	Service Transport	Service Transport	Hyper Text Transfer Protocol (HTTP)
Access Control	Service Access and Delivery	Service Transport	Service Transport	Internet Protocol (IP)
Access Control	Service Access and Delivery	Service Transport	Service Transport	Transport Control Protocol (TCP)
Access Control	Service Access and Delivery	Service Transport	Supporting Network Services	Directory Services (X.500)
Access Control	Service Access and Delivery	Service Transport	Supporting Network Services	Domain Name System (DNS)
Access Control	Service Access and Delivery	Service Transport	Supporting Network Services	Simple Network Management

5. Technical Reference Model (TRM) Table:
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.

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)
				Protocol (SNMP)
Data Exchange	Service Interface and Integration	Integration	Enterprise Application Integration	Transformation and Formatting
Data Exchange	Service Interface and Integration	Integration	Middleware	Database Access: OPEN ANSI SQL/92
Data Exchange	Service Interface and Integration	Integration	Middleware	Remote Procedure Call (RPC)
Data Exchange	Service Interface and Integration	Interoperability	Data Format / Classification	eXtensible Markup Language (XML)
Data Exchange	Service Interface and Integration	Interoperability	Data Types / Validation	XML Schema
Data Exchange	Service Platform and Infrastructure	Database / Storage	Database	SQL Server
Data Exchange	Service Platform and Infrastructure	Delivery Servers	Web Servers	Apache
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	Hard Disk Drive
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	Microprocessor
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	Random Access Memory (RAM)
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	Redundant Array of Independent Disks (RAID)
Computer / Telephony Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	Ethernet
Computer / Telephony Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	Token Ring
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Firewall
Computer / Telephony Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Gateway
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Hub
Computer / Telephony Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Integrated Services Digital Network (ISDN)
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Router
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	Switch
Computer / Telephony Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	T1/T3
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Peripherals	Printer
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Enterprise Server
Computer / Telephony Integration	Service Platform and Infrastructure	Hardware / Infrastructure	Wide Area Network (WAN)	Frame Relay
Change Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Change Management
Quality Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Defect Tracking
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Deployment Management
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Requirements Management and Traceability
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Task Management
Program / Project Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management	Version Management
Quality Management	Service Platform and Infrastructure	Software Engineering	Test Management	Business Cycle Testing
Quality Management	Service Platform and Infrastructure	Software Engineering	Test Management	Configuration Testing
Quality Management	Service Platform and Infrastructure	Software Engineering	Test Management	Functional Testing
Quality Management	Service Platform and Infrastructure	Software Engineering	Test Management	Installation Testing
Performance Management	Service Platform and Infrastructure	Software Engineering	Test Management	Performance Profiling
Quality Management	Service Platform and Infrastructure	Software Engineering	Test Management	Reliability Testing
Quality Management	Service Platform and	Software Engineering	Test Management	Security and Access Control

5. Technical Reference Model (TRM) Table:
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.

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)
	Infrastructure			Testing
Quality Management	Service Platform and Infrastructure	Software Engineering	Test Management	Usability Testing (508 Testing)

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.

6. Will the application leverage existing components and/or applications across the Government (i.e., USA.gov, Pay.Gov, etc)? No

a. If "yes," please describe.

Exhibit 300: Part II: Planning, Acquisition and Performance Information

Section A: Alternatives Analysis (All Capital Assets)

Part II should be completed only for investments identified as "Planning" or "Full Acquisition," or "Mixed Life-Cycle" investments in response to Question 6 in Part I, Section A above.

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A-94 for all investments and the Clinger Cohen Act of 1996 for IT investments to determine the criteria you should use in your Benefit/Cost Analysis.

1. Did you conduct an alternatives analysis for this project? Yes

a. If "yes," provide the date the analysis was completed? 7/30/2007

b. If "no," what is the anticipated date this analysis will be completed?

c. If no analysis is planned, please briefly explain why:

3. Which alternative was selected by the Agency's Executive/Investment Committee and why was it chosen?

Alternate selected was the initiative migrates the existing system components to multi-source mass market servers and workstations running the LINUX operating system. Mass market components provide more processing capability, more storage and more reliability at a fraction of the cost of a same-vendor UNIX replacement system for the current AWIPS components. This alternative also enables the greater than four million software source lines of code to be restructured into a Service Oriented Architecture (SOA).

a. What year will the investment breakeven? (Specifically, when the budgeted costs savings exceed the cumulative costs.) 2013

4. What specific qualitative benefits will be realized?

Allows for AWIPS capacity and performance to keep pace with projected computing and communications demands in a cost effective manner due to increased competition for hardware refresh and the Service Oriented Architecture (SOA) which will be much easier to maintain and enhance.

5. Federal Quantitative Benefits
What specific quantitative benefits will be realized (using current dollars) Use the results of your alternatives analysis to complete the following table:

	Budgeted Cost Savings	Cost Avoidance	Justification for Budgeted Cost Savings	Justification for Budgeted Cost Avoidance
PY - 1 2007 & Prior	0	115.94		Without continuous IT refreshment, AWIPS equipment will reach end of life and be unsupportable in 5 to 7 years and a full scale system acquisition will be necessary to replace the present system.
PY 2008	0	57.97		Without continuous IT refreshment, AWIPS equipment will reach end of life and be unsupportable in 5 to 7 years and a full scale system acquisition will be necessary to replace the present system.
CY 2009	0	57.97		Without continuous IT refreshment, AWIPS equipment will reach end of life and be unsupportable in 5 to 7 years and a full scale system acquisition will be necessary to replace the present system.
BY 2010	0	57.97		Without continuous IT refreshment, AWIPS equipment will reach end of life and be unsupportable in 5 to 7 years and a full scale system acquisition will be necessary to replace the present system.

6. Will the selected alternative replace a legacy system in-part or in-whole? Yes

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? This Investment

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

5b. List of Legacy Investment or Systems		
Name of the Legacy Investment of Systems	**UPI if available**	**Date of the System Retirement**
Automation of Field Operations and Services (AFOS)		9/30/2000

Section B: Risk Management (All Capital Assets)

You should have performed a risk assessment during the early planning and initial concept phase of this investment's life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment's life-cycle.

1. Does the investment have a Risk Management Plan? Yes

a. If "yes," what is the date of the plan? 7/10/2006

b. Has the Risk Management Plan been significantly changed since last year's submission to OMB? No

c. If "yes," describe any significant changes:

2. If there currently is no plan, will a plan be developed?

a. If "yes," what is the planned completion date?

b. If "no," what is the strategy for managing the risks?

3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule:

In accordance with the approach suggested in the Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK 3rd Edition, paragraph 11.5.2.2.3) the project cost and schedule baseline includes needed resources (time, funds, and other resources) to handle known risks, which might be characterized as either threats or opportunities.

Section C: Cost and Schedule Performance (All Capital Assets)

EVM is required only on DME portions of investments. For mixed lifecycle investments, O&M milestones should still be included in the table (Comparison of Initial Baseline and Current Approved Baseline). This table should accurately reflect the milestones in the initial baseline, as well as milestones in the current baseline.

1. Does the earned value management system meet the criteria in ANSI/EIA Standard-748? Yes

2. Is the CV% or SV% greater than +/- 10%? (CV%= CV/EV x 100; SV%= SV/PV x 100) No

a. If "yes," was it the CV or SV or both?

b. If "yes," explain the causes of the variance:

c. If "yes," describe the corrective actions:

3. Has the investment re-baselined during the past fiscal year? No

a. If "yes," when was it approved by the agency head?

4. Comparison of Initial Baseline and Current Approved Baseline

Complete the following table to compare actual performance against the current performance baseline and to the initial performance baseline. In the Current Baseline section, for all milestones listed, you should provide both the baseline and actual completion dates (e.g., "03/23/2003"/ "04/28/2004") and the baseline and actual total costs (in $ Millions). In the event that a milestone is not found in both the initial and current baseline, leave the associated cells blank. Note that the 'Description of Milestone' and 'Percent Complete' fields are required. Indicate '0' for any milestone no longer active.

Milestone Number	Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Percent Complete
		Planned Completion Date (mm/dd/yyyy)	Total Cost ($M) Estimated	Completion Date (mm/dd/yyyy)		Total Cost ($M)		Schedule (# days)	Cost ($M)	
				Planned	Actual	Planned	Actual			
1	Program Management (NGIT contract has ended)	9/30/2010	$21.509000	9/30/2010		$37.019400	$9.049100		$27.970300	100%
2	Architecture Analysis (NGIT contract has ended)	9/30/2010	$5.170000	9/30/2010	9/30/2005	$3.300000	$0.960900	1826	$2.339100	100%
3	IT Security (NGIT contract has ended)	9/30/2010	$8.450000	9/30/2010	9/30/2005	$8.450000	$2.632300	1826	$5.817700	100%
4	Linux Migration	9/30/2010	$15.885000	9/30/2010	9/30/2005	$15.885000	$12.335800	1826	$3.466598	99.48%
4-1	Linux Migration (NGIT contract has ended)	9/30/2010	$15.885000	9/30/2010	9/30/2005	$14.355000	$10.590400	1826	$3.764600	100%
4-2	LDAD H/W refresh	9/30/2007	$0.000000	9/30/2007		$1.530000	$1.745400		-$0.298632	94.56%
5	SBN Enhancement (NGIT contract has ended)	9/30/2010	$4.241000	9/30/2010	9/30/2005	$4.241000	$0.562800	1826	$3.678200	100%
6	Hardware Refresh/Comms	9/30/2010	$34.310000	8/16/2015		$66.187200	$11.426200		-$1.498120	15%
7	S/W Re-Architecture			6/30/2010	6/30/2007	$26.113999	$9.300079	1096	-$5.103559	16.07%
7-1	SW Product Improvement Plan TO-1			12/31/2006	12/31/2006	$0.261079	$0.261079	0	$0.000000	100%
7-2	AWIPS-II Development Environment TO-2 - TO-6			6/30/2007	6/30/2007	$1.128100	$1.179600	0	-$0.051500	100%
7-3	AWIPS-II TO-7 - TO-11			6/30/2009		$24.396820	$7.645200		-$4.837126	11.51%
7-4	AWIPS II Deployment TO-T			6/30/2010		$0.328000	$0.214200		-$0.214200	0%