#### **Exhibit 300: Capital Asset Plan and Business Case Summary Part I: Summary Information And Justification**

#### Section A: Overview Date of submission: Apr 9, 2009

- 1. Agency: 452
- 2. Bureau: 00
- 3. Name of this Capital Asset: Enterprise Digital Asset Network
- 4. Unique Project (Investment) Identifier: 452-00-01-02-01-1012-00
- 5. What kind of investment will this be in FY2010? Full-Acquisition
- 6. What was the first budget year this investment was submitted to OMB? FY2009
- 7. 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 Smithsonian currently lacks any way of providing the public, researchers, and staff with unified search and access to its collections and associated digital assets which are stored in museum specific collection information systems (CISs). Whether an inquiry for a specific collection object or digital asset (image, video, and audio files) is being made by a scholar, the general public, a curator, or a scientist, currently a person must know which Smithsonian unit holds the object, and in which IT system the object resides. For Smithsonian staff preparing online exhibits, the current IT architecture requires staff to copy the digital asset into yet another system or location in order to use the digital asset. This approach consumes limited storage space and more importantly it separates the digital asset from its primary system of record. Once separated from its primary system of record, a digital asset loses its link to the metadata describing the asset such as its description, copyright, restricted uses, and provenance information. Stewardship of Smithsonian collections are put at risk. The public views the Smithsonian as a single institution, rather than a federation of many museums, research institutes, and offices. In the current web-enabled world, they expect a single point of access into the Institutions collections. The Smithsonian has the need to develop a centralized, reusable, automated set of services and processes for accessing its collections and digital assets if it is to remain relevant in the Internetenabled world. The EDAN initiative will provide a centralized, reusable metadata repository and set of services so that web applications can search and access data and digital assets held within the Smithsonians major library, archive, and collections systems, both for internal access and search via the world wide web. To implement EDAN, SI must: Acquire storage software and hardware necessary to support storage of large quantities of digital assets and metadata, integrating multiple storage tiers to balance cost and performance while supporting unified access and effective stewardship; Implement a metadata delivery and search service; Implement an image delivery service thereby eliminating the need to duplicate digital assets across systems and manage cached derivatives of these assets; Define input and output standards from

# EDAN that will ensure reuse and repurposing of the information without creating unnecessary duplication.

- 8. Did the Agency's Executive/Investment Committee approve this request? **yes** a. If "yes," what was the date of this approval? **Jul 31, 2008**
- 9. Did the Project Manager review this Exhibit? yes
- 10. Contact information of Program/Project Manager?

Name **Mr. Matthew Jenkins** Phone Number **202-633-0629** E-mail **jenkinsm@si.edu** 

- 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? Jun 16, 2008
- 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? Jan 1, 1901
- 11. 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? If "yes," will this investment meet sustainable design principles?
- 12. 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

# Expanded E-Government

- a. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? This investment greatly expands public access to Smithsonian collections and research through the Internet, interactive exhibit technologies, and learning centers and enables a broad range of digital asset management capacities that provide automated information, processes, and procedures to steward collections (objects and media). The initiative is not an approved shared service provider or managing partner
- 14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)? (For more information about the PART, visit <u>www.whitehouse.gov/omb/part</u>.) **no** 
  - a. If "yes," does this investment address a weakness found during a PART review?
  - b. If "yes," what is the name of the PARTed program?
- 15. If "yes," what rating did the PART receive?
- 16. Is this investment for information technology? yes

For information technology investments only:

16. What is the level of the IT Project? (per CIO Council PM Guidance) Level 1

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
  - 1. If "yes," does this investment address a FFMIA compliance area?
  - 2. If "yes," which compliance area:
  - 3. If "no," what does it address?
- 20. 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
- 21. What is the percentage breakout for the total FY2010 funding request for the following?

Hardware 6

Software 18

- Services 57
  - Other 19
- 22. 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**
- 23. Contact information of individual responsible for privacy related questions:

Marsha Shaines	Name
202-633-5106	Phone Number
Acting General Counsel	Title
shainesm@si.edu	E-mail

- 24. Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? **yes**
- 25. Does this investment directly support one of the GAO High Risk Areas? no

#### Section B: Summary of Spending

	PY-1 and earlier	PY 2008	CY 2009
Planning:	0	0	0
Acquisition:	0	0	0
Subtotal Planning & Acquisition:	0	0	0
Operations & Maintenance:	0	0	0
TOTAL:	0	0	0
Government FTE Costs	0	0	0
Number of FTE represented by Costs:	0	0	0

- Will this project require the agency to hire additional FTE's? yes

   a. If "yes", How many and in what year? 3 in FY 2011
- 2. If the summary of spending has changed from the FY2009 President's budget

#### **Section D: Performance Information**

	Performance Information Table								
Fiscal Year	Strategic Goal(s) Supported	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Target	Actual Results		
2010	Strengthened Research	Processes and Activities	Participation	The number of searches conducted via the EDAN search interface	0	5 million combined internal and public queries via EDAN	TBD		
2010	Enhanced Management Excellence	Customer Results	Integration	The number of collection information systems (CIS) integrated into EDAN	0	2 CIS's added to EDAN	TBD		
2010	Increased Public Engagement	Mission and Business Results	sion and usiness Results Cultural and Historic Preservation Cultural and Historic Preservation Cultural and Historic Preservation EDAN		0	2 new virtual exhibits or museums produced using EDAN	TBD		
2010	Increased Public Engagement	Technology	Availability	EDAN users may perform a query via the web interface 24 x 7	0	95% availability 24 x 7, excluding planned outages	TBD		

## Section F: Enterprise Architecture (EA)

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.
     Enterprise Digital Asset Network
  - b. If "no," please explain why?
- 3. Is this investment identified in a completed and approved segment architecture? **yes** 
  - 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

	4. Service Component Reference Model (SRM) Table :						
Agency Component	cy Agency FEA SRM		FEA SRM	FEA SRM Component Reused		Internal or	BY Funding
Name	Description	Туре	component	Component Name	UPI	Reuse?	Percentage
EDAN	The EDAN system will maintain a subset of data for search and retrieval from multiple Smithsonian Collections Information Systems	Content Management	Tagging and Aggregation			No Reuse	0
EDAN	Information within EDAN will support virtual museums using collections items from various Smithsonian Collections Information Systems (CISs)	Content Management	Content Publishing and Delivery			No Reuse	0
EDAN	EDAN Search Services will provide mapping of meta data from various (CISs) into a common search repository	Knowledge Management	Information Mapping / Taxonomy			No Reuse	0
EDAN	EDAN will support providing data from multiple CISs to Virtual Museums	Knowledge Management	Information Sharing			No Reuse	0
EDAN	EDAN Search Services will enable categorization of information based on facets defined	Knowledge Management	Categorization			No Reuse	0

# architecture codes, please refer to http://www.egov.gov/. 017-000

	as part of its metadata model/schema					
EDAN	EDAN will provide the means to enter an information specific to the objects exhibited in virtual museums	Knowledge Management	Knowledge Capture		No Reuse	0
EDAN	EDAN services will facilitate the sharing of information in collections systems via a standard search interface and interfaces supplying virtual museums with content.	Knowledge Management	Knowledge Distribution and Delivery		No Reuse	0
EDAN	EDAN repository services will host metadata from various Smithsonian CISs	Data Management	Meta Data Management		No Reuse	0
EDAN	EDAN Multimedia services will facilitate the use of multimedia digital assets in search results and virtual exhibits within virtual museums	Visualization	Multimedia		No Reuse	0

5. Technical Reference Model (TRM) Table:						
FEA SRM Component	FEA TRM Service Area	FEA TRM Service Category	FEA TRM Service Standard	Service Specification		
Tagging and Aggregation	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox		
Tagging and Aggregation	Service Access and Delivery	Delivery Channels	Internet			

Tagging and Aggregation	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Tagging and Aggregation	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Tagging and Aggregation	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference Model
Tagging and Aggregation	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Tagging and Aggregation	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Tagging and Aggregation	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Content Publishing and Delivery	Service Access and Delivery	Delivery Channels	Internet	
Content Publishing and Delivery	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Content Publishing and Delivery	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Information Mapping / Taxonomy	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Information Mapping / Taxonomy	Service Access and Delivery	Delivery Channels	Internet	
Information Mapping / Taxonomy	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Information	Service Platform	Delivery Servers	Web Servers	TBD based on SI

Mapping / Taxonomy	and Infrastructure			Technical Reference Model
Information Mapping / Taxonomy	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference Model
Information Mapping / Taxonomy	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Information Mapping / Taxonomy	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Information Mapping / Taxonomy	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Information Mapping / Taxonomy	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Information Sharing	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Information Sharing	Service Access and Delivery	Delivery Channels	Internet	
Information Sharing	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Information Sharing	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Information Sharing	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference Model
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Information Sharing	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Information Sharing	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Information Sharing	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Categorization	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Categorization	Service Access and Delivery	Delivery Channels	Internet	
Categorization	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Categorization	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Categorization	Service Platform	Delivery Servers	Media Servers	TBD based on SI

	and Infrastructure			Technical Reference Model
Categorization	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Categorization	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Categorization	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Categorization	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Knowledge Capture	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Knowledge Capture	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Knowledge Capture	Service Access and Delivery	Delivery Channels	Internet	
Knowledge Capture	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Knowledge Capture	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Knowledge Capture	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference Model
Knowledge Capture	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Knowledge Capture	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Knowledge Capture	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Knowledge Distribution and Delivery	Service Access and Delivery	Delivery Channels	Internet	
Knowledge Distribution and Delivery	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Knowledge Distribution and	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference

Delivery				Model
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
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Meta Data Management	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Meta Data Management	Service Access and Delivery	Delivery Channels	Internet	
Meta Data Management	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Meta Data Management	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
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Meta Data Management	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference Model
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Meta Data Management	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Meta Data Management	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model
Multimedia	Service Access and Delivery	Access Channels	Web Browser	IE, Safari, Firefox
Multimedia	Service Access and Delivery	Delivery Channels	Internet	
Multimedia	Component Framework	User Presentation / Interface	Content Rendering	TBD based on SI Technical Reference Model
Multimedia	Service Platform and Infrastructure	Delivery Servers	Web Servers	TBD based on SI Technical Reference Model
Multimedia	Service Platform and Infrastructure	Delivery Servers	Media Servers	TBD based on SI Technical Reference Model
Multimedia	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD based on SI Technical Reference

				Model
Multimedia	Service Platform and Infrastructure	Hardware / Infrastructure	Supporting Security Services	TBD based on SI Technical Reference Model
Multimedia	Service Interface and Integration	Interoperability	Data Format / Classification	TBD based on SI Technical Reference Model
Multimedia	Service Interface and Integration	Interoperability	Data Transformation	TBD based on SI Technical Reference Model

- 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.

## Part II: Planning, Acquisition And Performance Information

#### Section B: Risk Management (All Capital Assets)

- 1. Does the investment have a Risk Management Plan? no
  - a. If "yes," what is the date of the plan?
  - b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?
  - c. If "yes," describe any significant changes:
- 2. If there currently is no plan, will a plan be developed? yes
  - a. If "yes," what is the planned completion date? Mar 30, 2010
- 3. If "no," what is the strategy for managing the risks?
- 4. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule: All contractor risks will be addressed in the risk management plan. Contractor activities are governed by Smithsonian security policies, the Institutions life cycle management methodology, the configuration management process and the enterprise architecture. Infrastructure standards, a clearly defined architecture and life cycle methodology, and an understanding of best practices minimize much of the risk associated with the deployment of COTS packages and in house development. Life cycle cost estimate risks are mitigated through a phase-based project management approach where the scope of the project is re-evaluated for each phase with the development of a project management plan, and by conducting life cycle management reviews for each life cycle phase. Investment schedule risks are mitigated by allocating sufficient project management and technical resources to the project; developing detail task level project schedules; working closely with project sponsors to ensure functional resources are available to provide project guidance, information, and project support for the implementation; and working closely with the contractors and software vendors to proactively address issues that arise to mitigate potential cost and schedule impacts.