# BY08 Capital Asset Plan and Business Case Summary Exhibit 300

# PART I: SUMMARY INFORMATION AND JUSTIFICATION

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.

#### Section A: Overview (All Capital Assets)

The following series of questions are to be completed for all investments to help OMB to identify which agency and bureau is responsible for managing each capital asset, which OMB MAX budget account funds the project, the kind of the project, who to contact with questions about the information provided in the exhibit 300, and whether or not it is an IT or a non-IT capital asset.

(1) Date of Submission	09/11/2006		
(2) Agency:	422		
(3) Bureau:	00		
(4) Name of this Capital Asset:	GMLoB Research.gov		
(250 Character Max)			
(5) Unique ID (Unique Project	422-00-01-04-01-1326-24		
Identifier):			
Format xxx-xx-xx-xx-xx-xx-xx	XX		
(For IT investments only, see see	ction 53. For all other, use agency ID system.)		
(6) What kind of investment	Mixed Life Cycle		
will this be in FY2008?			
(7) What was the first budget			
year this investment was	FY2008		
submitted to OMB?			

(8) Provide a brief summary and justification for this investment, including a brief description of how this closes a gap in part or in whole an identified agency performance gap: (2500 Char Max)

As part of its continuing leadership in and commitment to the broader research community, NSF will leverage its capabilities and technologies to a government-wide audience through the Grants Management Line of Business (GMLoB). In February 2006, OMB selected NSF to be a GMLoB consortium lead because of its focus on the research community; high standards and performance to its customers; and leadership position in the grants community. NSF's mission is to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. To fulfill its mission, NSF effectively develops, deploys, and manages technology in service of the research community. In its ongoing effort to meet and exceed the community's requirements, NSF envisions developing a single web portal, Research.gov, containing government-wide resources and tools for research institutions to conduct grants business with Federal research agencies. This portal enhances grantee access to the government and reduces government-wide spending on research grants infrastructure. Initial portal tools include: Application Status — Site where

applicants check status of applications submitted to participating agencies; Project Reports – Tool to complete project reports using a standard government-wide format for submission of research project reports: Federal Financial Report – Tool to complete and submit the government-wide report: PDF Conversion – PDF conversion tool for grant documents; Payments and Cash Requests – Tool to request funds disbursement and payment; R&R Enhanced Find – Research-focused search capability. Federal research agencies will sign up to offer services to grantees through these tools, and NSF will recover operations costs through a fee-forservice arrangement. To develop its vision, NSF interviewed research grantees and grant-making agencies. NSF also successfully conducted an Application Status pilot with USDA CSREES, which allows principal investigators to check the status of their USDA CSREES and NSF proposals at one site. NSF has received exceptionally positive feedback from the participating grantees as well as from USDA CSREES. The portal approach aligns with NSF's research mission and leverages proven functionality and expertise with minimal capital investment. It focuses on the needs of grantees, provides maximum flexibility to account for differing agency strategies, and allows best tools to be offered from any research agency.

(9) Did the Agency's Executive/Investment Committee approve this request?	yes
a. If "yes," what was the date of this approval?	08/30/2006
(10) Did the Project Manager review this Exhibit?	yes

#### 11) Contact Information of Project Manager?

,	
Name:	David Saunders
Phone Number:	(703) 292-4261
E-Mail:	dmsaunde@nsf.gov

(12) Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project.

no

(a) Will this investment include electronic assets (including computers)?	ves
(b) Is this investment for new construction or major retrofit of a Federal building or	
facility? (answer applicable to non-IT assets only)	
[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 support one of the PMA initiatives? yes

If "yes," select all that apply:
President's Management Agenda (PMA) Initiatives
Expanded E-Government

a. Briefly describe how this asset directly supports the identified initiative(s)?

This investment supports the Expanded E-Government initiative by automating components of the grants management lifecycle for the research community. The shared, best of breed grants management services provided to partner agencies through the Research.gov portal will: Increase transparency and efficiency; Improve access to programmatic and financial information; Enhance reporting on award accomplishments; Improve post award monitoring and oversight; Foster collaboration and information sharing.

(14) Does this investment support a program assessed using OMB's Program Assessment Rating Tool (PART)? 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 ?	
(c) If "yes," what rating did the PART receive?	

(15) Is this investment for information technology? (see section 53 for definition) yes

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

(16) What is the level of the IT Project (per CIO Council PM Guidance)?	Level 3
(17) What project management qualifications does the Project Manager have? (per CIO Council PM Guidance):	(2) Project manager qualification is under review for this investment
<ul><li>(18) Is this investment identified as "high risk" on</li><li>the Q4 - FY 2006 agency high risk report</li><li>(per OMB's 'high risk" memo)?</li></ul>	no
<ul><li>(19) Is this a financial management system?</li><li>(a) If "yes," does this investment address a FFMIA</li></ul>	no
compliance area?[1] If "yes," which compliance area:[2] If "no," what does it address?	
<ul><li>(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:</li></ul>	

(20) What is the percentage breakout for the total FY2008 funding request for the following? (This should total 100%)

Hardware % :	Software %:	Services %:	Other %:	Total %
5	15	70	10	100

(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

(22) Contact information of individual responsible for privacy related questions:

Name:	Leslie Jensen	
Phone		
Number:	703-292-8060	
Title:	NSF FOIA/Privacy Act Officer	
E-Mail:	E-Mail: Ijensen@nsf.gov	

(23) Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration's approval? yes

# Section B: Summary of Funding (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 <u>only</u> 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.

				represent b	oudget decisions)		
	PY-1 & Spending Prior to 2006	<b>PY</b> 2006	<b>CY</b> 2007	<b>BY</b> 2008	BY +1 13Y+2 <b>2010 BY+3</b> 2009 <b>2011</b>	BY+4 2012 and beyond	Total
Planning	\$0.000	\$0.000	\$2.315	\$2.648			
Acquisition	\$0.00	\$0.00	\$5.403	\$11.582			
Subtotal Planning & Acquisition	\$0.00 0	\$0.00 0	\$7.71 8	\$14.230			
- Operations Maintenanc	\$0.00 0	\$0.00	\$0.00	\$0.675	-		
TOTAL	\$0.000	\$0.000	\$7.718	\$14.905			
Government ]	FIE Costs sho	uld not be in	cluded in th	e amounts p	rovided above.		
Government FTE Costs	\$0.00	\$0.00 0	\$1.11 0	\$1.62 8			
Number of FTE represented by cost		0			_		

*Note:* For the cross-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? yes

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

(3) If the summary of spending has changed from the FY2007 President's budget request, briefly explain those changes.

This is a new capital investment that was not included in the FY 2007 President's budget request. The new request for FY 2007 is to initiate planning and development opportunities in this investment.

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

(1) Complete the table for all contracts and/or task orders in place or planned for this investment:

Contract or Task Order Number: There are no contracts and/or task orders currently in place or planned for this investment. NSF will update the table upon completing the Acquisition plan by no later than December 31, 2006. Type of Contract/TO Used: TBD Has the Contract Being Awarded: no Contract Actual/Planned Award Date: Contract/TO Start Date: Contract/TO End Date: Contract/TO Total Value (\$M): \$0.000 Inter Agency Acquisition: no Performance Based Contract: yes Competitively Awarded Contract: yes Alternative Financing: NA EVM Required: yes Security Privacy Clause: yes Contracting Officer (CO) Contact Information: CO Name: Patricia S. Williams CO Contact Information (Phone/Email): 703-292-8240 / pswillia@nsf.gov CO Certification Level (Level 1, 2, 3, N/A): 3

If N/A has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? (Y/N)

(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:

#### Earned value will be required for future contracts as applicable.

(3) Do the contracts ensure Section 508 compliance? n/a

Section 508 Compliance Explanation:

No contracts and/or task orders are currently in place, planned or awarded yet for this investment. Applicable contracts will ensure Section 508 compliance. NSF will update this section of the table upon completing the Acquisition plan by no later than December 31, 2006.

(4) Is there an acquisition plan which has been approved in accordance with agency requirements? no

(a) If "yes", what is the date? 12/31/2006

(b) If "no," will an acquisition plan be developed? yes [1] If "no," briefly explain why:

NSF has not yet developed an acquisition plan as the investment is still in the early stage of planning and development. An acquisition plan will be completed by no later than December 31, 2006. There are no contracts and/or task orders currently in place or planned for this investment. NSF will update the table upon completing the Acquisition plan by no later than December 31, 2006.

### 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 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 Table 1 below for reporting performance goals and measures for all non-IT investments and for existing IT investments that were initiated prior to FY 2005. The table can be extended to include measures for years beyond FY 2006.

#### Table 1

Fiscal Year	Strategic Goal(s) Performance Measure Supported	Actual/ Baseline (from previous year)	Planned Performance Metric (Target)	Performance Metric Results (Actual)
-------------	-------------------------------------------------------	---------------------------------------------	-------------------------------------------	----------------------------------------

All new IT investments initiated for FY 2005 and beyond must use Table 2 and are required to use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Please use Table 2 and the PRM to identify the performance information pertaining to this major IT investment. 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 at least four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov.

#### Table 2

Fiscal Year	Measurement Area I⊺	Measurement Grouping IT	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2008	Mission and Business Results	Management Improvement	# of Offerings	0	4	
2008	Customer Results	Customer Satisfaction	Grantee Satisfaction	0	60%	
2008	Customer Results	New Customers and Market Penetration	# of Agencies Using Offerings	0	3	

Fiscal Year	Measurement Area IT	Measurement Grouping IT	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2008	Processes and Activities	Innovation and Improvement	# of Registered users		2,000	
2008	Technology	Availability	Portal Uptime		99%	

# Section E: Security and Privacy (IT Capital Assets Only)

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

All systems supporting and/or part of this investment should be included in the tables below, inclusive of both agency owned systems and contractor systems. For IT investments under development, security and privacy planning must proceed in parallel with the development of the system/s to ensure IT security and privacy requirements and costs are identified and incorporated into the overall lifecycle of the system/s.

Please respond to the questions below and verify the system owner took the following actions:

(1) Have the IT security costs for the system(s) been identified and integrated into the overall costs of the investment: yes

(a) If "yes," provide the "Percentage IT Security" for the budget year: 10

(2) Is identifying and assessing security and privacy risks a part of the overall risk management effort for each system supporting or part of this investment. yes

#### (3) Systems in Planning - Security:

Name Of System	Agency Or Contractor Operated	Planned Operational	Planned or Actual
	System?	Date	C&A Completion Date
Research Portal	Contractor and Government	09/30/2008	09/30/2008

(4) Operational Systems - Security:

Name Of System	Agency Or Contractor Operated system	Risk Impact Level (High,	Has the C&A been completed using NIST 800- 37?	Date C&A Complete	used for the Security Controls	Date Completed Security Control Testing	Contingency	
----------------	-----------------------------------------	-----------------------------	---------------------------------------------------------------	----------------------	-----------------------------------	-----------------------------------------------	-------------	--

(5) Have any weaknesses, not yet remediated, related to any of the systems part of or supporting this investment been identified by the agency or IG? no

(a) If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process?

(6) Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses? no

(a) If "yes," specify the amount, a general description of the weakness, and how the funding request will remediate the weakness.

(7) How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above?

There are no contractor operated systems in operation. Robust, standard procedures will be implemented when systems are operational.

(8) Planning and Operational Systems - Privacy:

(a) Name Of System	< / <	(c) Is there a PIA that covers this system?	(d) Is the PIA available to the public?	Notice	(I) Was a new or amended SORN published in FY06?
Research Portal	yes	2. No.	<ol> <li>No, because the PIA has not been prepared.</li> </ol>		5. No, because the system is not a Privacy Act system of records.

(c) Is there a Privacy Impact Assessment (PIA) that covers this system?

- 1. Yes.
- 2. No.
- 3. No, because the system does not contain, process, or transmit personal identifying information.
- 4. No, because even though it has personal identifying information, the system contains information solely about federal employees and agency contractors.

(d) Is the PIA available to the public?

- 1. Yes.
- 2. No, because a PIA is not yet required to be completed at this time.
- 3. No, because the PIA has not been prepared.

(f) Was a new or amended SORN published in FY2006?

- 1. Yes, because this is a newly established Privacy Act system of records.
- 2. Yes, because the existing Privacy Act system of records was substantially revised in FY 06.
- 3. No, because the existing Privacy Act system of records was not substantially revised in FY 06.
- 4. No; the system is operational, but the SORN has not yet been published.
- 5. No, because the system is not a Privacy Act system of records.

#### Section F: Enterprise Architecture (EA) (IT Capital Assets Only)

In order to successfully address this area of the business case and capital asset plan you must ensure the investment is included in the agency's EA and Capital Planning and Investment Control (CPIC) process, and is mapped to and supports the FEA. You must also ensure the business case demonstrates 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? no (a) If "no," please explain why?

NSF has not yet included this investment in its EA as the investment is still in the early planning and development stage.

(2) Is this investment included in the agency's EA Transition Strategy? no

a. If "yes," provide the	
investment name as identified	
in the Transition Strategy	
provided in the agency's most	
recent annual EA	
Assessment.	
b. If "no," please explain	NSF has not yet included this investment in its EA Transition Strategy as the
why?	investment is still in the early planning and development stage.

(3) 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 <u>http://www.whitehouse.gov/omb/egov/.</u>

Agency	Agency	FEASRM	FEA SRM	FEA Se	ervice Component Reused (b)	External	(d)
Component Name	Component Description	Service Type	Component (a)	Reused Service Component Name	Reused Service Component UPI	Reuse (c)	Funding Percentage
Application Status	The Application Status component provides the primary repository of status information regarding applications submitted by the research	Da <sub>t</sub> a Management	Loading and Archiving			No Reuse	8
Federal Financial Report (FFR)	The FFR service will provide access to the standard FFR form for all grants at a	Knowledge Management	Capture			No Reuse	7
Payment and Cash Requests	The Payment and Cash Requests service will allow grantees to request and receive payments through NSF for other agencies	Management	Payment / Settlement			No Reuse	19
PDF File Conversion	Converts file attachments to format for use in other applications such as Grants.gov	Management	Document Conversion			No Reuse	2
Project Reports	Project Reports provides an automated mechanism for submission and review of research project performance reports that are used to manage grants, and obtain	Management	Capture			No Reuse	25
R& R Enhanced Find	R&R Enhanced Find will provide key word search and document retrieval capabilities		Query			No Reuse	3

Research Portal The Research	Management	Knowledge		No Reuse	27
Portal will enable the		Distribution and Delivery			
transfer of		5			
grants management					
knowledge to the research community					

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 funding level transferred to another agency to pay for the service.

4. 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	FEA TRM Service Standard	FEA Service Specification (b)
Loading and Archiving	Service Interface and Integration	Integration	Middleware	TBD
Loading and Archiving	Service Interface and Integration	Interface	Web Servers	TBD
Loading and Archiving	Service Platform and Infrastructure	Database /Storage	Database	TBD
Document Conversion	Service Access and Delivery	Access Channels	Web Browser	TBD
Document Conversion	Service Access and Delivery	Delivery Channels	Extranet	TBD
Document Conversion	Service Access and Delivery	Support Platforms	Platform Independent	TBD
Document Conversion	Service Platform and Infrastructure	Delivery Servers	Portal Servers	TBD
Document Conversion	Service Platform and Infrastructure	Delivery Servers	Application Servers	TBD
Document Conversion	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	TBD
Document Conversion	Component Framework	Presentation / Interface	Dynamic Server-Side Display	TBD

Document ConversionComponent Framework Data InterchangeData InterchangeData ExchangeTBDDocument ConversionService Interface and IntegrationIntegrationIntegrationMiddlewareTBDDocument ConversionService Interface and IntegrationInteroperabilityData Format / ClassificationTBDKnowledge CaptureService Access and DeliveryAccess ChannelsWeb BrowserTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureDatabase / StorageDatabaseTBD	
Document ConversionService Interface and IntegrationInteroperabilityData Format / ClassificationTBDKnowledge CaptureService Access and DeliveryAccess ChannelsWeb BrowserTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureDelivery StorageDatabaseTBD	
Document ConversionService Interface and IntegrationInteroperabilityData Format / ClassificationTBDKnowledge CaptureService Access and DeliveryAccess ChannelsWeb BrowserTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPlatabase / StorageDatabaseTBD	
Service Interface and IntegrationAccess ChannelsWeb BrowserTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatbaseTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPlatbaseTBD	
Knowledge CaptureService Access and DeliveryAccess ChannelsWeb BrowserTBDKnowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureDelivery StorageDatabaseTBD	
Knowledge Capture       Service Access and Delivery       Delivery Channels       Extranet       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Portal Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Portal Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Support Platforms       Platform Independent       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Support Platforms       Platform Independent       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Delivery Servers       Platform Independent       TBD         Knowledge Capture       Service Platform and       Delivery Servers       Delivery Servers       Delivery Servers       TBD	
Knowledge CaptureService Access and DeliveryDelivery ChannelsExtranetTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPortal ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersApplication ServersTBDKnowledge CaptureService Platform and InfrastructureSupport PlatformsPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureDelivery ServersPlatform IndependentTBDKnowledge CaptureService Platform and InfrastructureDatabase / StorageDatabaseTBD	
Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Portal Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Support Platforms       Platform Independent       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Platform Independent       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Platabase       Delivery	
Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Portal Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Support Platforms       Platform Independent       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Platabase / Storage       Database       TBD	
Knowledge Capture     Service Platform and Infrastructure     Delivery Servers     Application Servers     TBD       Knowledge Capture     Service Platform and Infrastructure     Support Platforms     Platform Independent     TBD       Knowledge Capture     Service Platform and Infrastructure     Support Platforms     Platform Independent     TBD       Knowledge Capture     Service Platform and Infrastructure     Database / Storage     Database     TBD	
Infrastructure     Infrastructure       Knowledge Capture     Service Platform and Infrastructure     Delivery Servers     Application Servers     TBD       Knowledge Capture     Service Platform and Infrastructure     Support Platforms     Platform Independent     TBD       Knowledge Capture     Service Platform and Infrastructure     Database / Storage     Database     TBD	
Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Application Servers       TBD         Knowledge Capture       Service Platform and Infrastructure       Support Platforms       Platform Independent       TBD         Knowledge Capture       Service Platform and Infrastructure       Delivery Servers       Platform Independent       TBD         Knowledge Capture       Service Platform and       Database / Storage       Database       TBD	
Knowledge Capture     Service Platform and Infrastructure     Support Platforms     Platform Independent     TBD       Knowledge Capture     Service Platform and     Database / Storage     Database     TBD	
Knowledge Capture     Service Platform and Infrastructure     Support Platforms     Platform Independent     TBD       Knowledge Capture     Service Platform and     Database / Storage     Database     TBD	
Knowledge Capture     Service Platform and     Database / Storage     Database     TBD	
Knowledge Capture Service Platform and Hardware! Infrastructure Servers / Computers TBD	
TBD	
Knowledge Capture Component Framework Presentation / Interface Dynamic Server-Side Display	
Knowledge Capture Component Framework Business Logic Platform Independent TBD	
Knowledge Capture Component Framework Data Interchange Data Exchange TBD	
Knowledge Capture Component Framework Data Management Database Connectivity	
Knowledge Capture Component Framework. Data Management Reporting and Analysis	
Knowledge Capture         Service Interface and         Integration         Middleware         TBD	
Integration	
Knowledge Capture Service Interface and Interoperability Data Format / Classification TBD	
Integration	
Knowledge Capture Service Interface and Interoperability Data Types / Validation TBD	
Integration	
Integration Discussion Discussion	
Knowledge Capture         Service Interface and         Interface         Service Discovery         TBD	
Integration	
Knowledge Distribution Service Access and Access Channels Web Browser TBD	
and Delivery Delivery	
Knowledge Distribution Service Access and Delivery Channels Extranet TBD	
and Delivery Delivery	
Knowledge Distribution Service Platform and Delivery Servers Portal Servers TBD	
and Delivery Infrastructure	
Knowledge Distribution Service Platform and Delivery Servers Application Servers TBD	
and Delivery Infrastructure	
Knowledge Distribution Service Platform and Support Platforms Platform Independent TBD	
and Delivery Infrastructure	
Knowledge Distribution Service Platform and Database / Storage Database TBD	
and Delivery Infrastructure	
La dura de la constructura Computara TPD	
and Delivery Infrastructure	
· · · · · · · · · · · · · · · · · · ·	
Knowledge Distribution Component Framework Presentation / Interface Dynamic Server-Side Display TBD	
and Delivery	

Knowledge Distribution	Component Framework	Business Logic	Platform Independent T	
and Delivery	-		BD	
Knowledge Distribution and Delivery	Component Framework	Data Interchange	Data Exchange T BD	
Knowledge Distribution	Component Framework	Data Management	Database Connectivity T	
and Delivery			BD	
Knowledge Distribution and Delivery	Component Framework	Data Management	Reporting and Analysis	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Integration	Middleware	TBD
Knowledge Distribution	Service Interface and	Interoperability	Data Format / Classification	TBD
and Delivery	Integration			
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	Service Interface and	Interface	Service Discovery	ТВD
and Delivery	Integration			
Payment / Settlement	Service Access and Delivery	Access Channels	Web Browser	TBD
Payment / Settlement	Service Access and Delivery	Delivery Channels	Extranet	TBD
Payment / Settlement	Service Access and Delivery	Service Requirements	Authentication / Single Sign- on	TBD
Payment / Settlement	Service Platform and	Support Platforms	Platform Independent	TBD
Payment/ Settlement	Service Platform and.	Delivery Channels	Portal Servers	TBD
Payment / Settlement	Service Platform and	Hardware / Infrastructure	Servers / Computers	TBD
Payment / Settlement	Infrastructure Service Platform and	Database / Storage	Database	TBD
Payment / Settlement	Infrastructure Component Framework	Security	Certificates / Digital	TBD
			Signatures	
Payment / Settlement	Component Framework	Security	Supporting Security Services	TBD
Payment / Settlement	Component Framework	Presentation / Interface	Dynamic Server-Side Display	TBD
Payment / Settlement	Component Framework	Business Logic	Platform Independent	TBD
Payment / Settlement	Component Framework	Data Interchange	Data Exchange	TBD
Payment / Settlement	Component Framework	Data Management	Database Connectivity	TBD
Payment / Settlement	Service Interface and Integration	Integration	Middleware	TBD
Query	Service Access and Delivery	Access Channels	Web Browser	TBD
Query	Service Access and Delivery	Delivery Channels	Extranet	TBD
Query	Service Platform and Infrastructure	Delivery Servers	Portal Servers	TBD
Query	Service Platform and Infrastructure	Delivery Servers	Application Servers	TBD

Query	Service Platform and	<u>Support</u> Platforms	Platform Independent	TBD
	Infrastructure			
Query	Service Platform and	Hardware /Infrastructure'	Servers / Computers	TBD
	Infrastructure			
Query	Component Framework	Presentation / Interface	Dynamic Server-Side Display	TBD
Query	Component Framework	Business Logic	Platform Independent	TBD
Query	Component Framework	Data Interchange	Data Exchange	TBD
Query	Component Framework	Data Management	Database Connectivity	TBD
Query	Component Framework	Data Management	Reporting and Analysis	TBD
Query	Service Interface and	Integration	Middleware	TBD
	Integration			
Query	Service Interface and	Interoperability	Data Format / Classification	TBD
	Integration			
Query	Service Interface and	Interoperability	Data Types / Validation	TBD
	Integration			
Query	Service Interface and	Interface	Service Discovery	TBD
	Integration			

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.

5. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)? yes

a. If "yes," please describe.

NSF will leverage the architectural and process based standards of the e-Authentication initiative for verifying the identities of Research.gov users. This will enable NSF to achieve e-Authentication compliance in a way minimizes authentication system development and acquisition costs.

6. Does this investment provide the public with access to a government automated information system? yes

(a) If "yes," does customer access require specific software (e.g., a specific web browser version)?

[1] If "yes," provide the specific product name(s) and version number(s) of the required software and the date when the public will be able to access this investment by any software (i.e. to ensure equitable and timely access of government information and services).

# PART II: PLANNING, ACQUISITION AND PERFORMANCE INFORMATION

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.

#### Section A: Alternatives Analysis (All Capital Assets)

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?

08/28/2006

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

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

#### 2. Use the results of your alternatives analysis to complete the following table:

Alternative Analyzed	Description of Alternative	Lifecycle Costs Estimates	Lifecycle Benefits Estimate

Alternative Analyzed	Description of Alternative	Lifecycle Costs Estimates	Lifecycle Benefits Estimate

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

4. What specific qualitative benefits will be realized?

This alternative will benefit the grantee community by providing user friendly, streamlined access to best service offerings and information from throughout the federal research community. Research grants agencies will have a more grantee focused mentality, resulting in greater collaboration and best practices sharing among participating agencies. Finally, this alternative will allow for more coordination and consistency in e-business across the research grants community.

# 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? 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?

12/31/2006

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

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

NSF incorporated investment risks into the life cycle cost estimate and investment schedule in several ways.

# 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. Answer the following questions about current cumulative cost and schedule performance. Indicate whether the information provided is contractor-only, or whether it includes both government and contractor costs.

- a. What is the Planned Value (PV)? \$0.000
- b. What is the Earned Value (EV)? \$0.000
- c. What is the actual cost of work performed (AC)? \$0.000
- d. What costs are included in the reported Cost/Schedule Performance information? (Government Only/Contractor Only/Both) Contractor Only

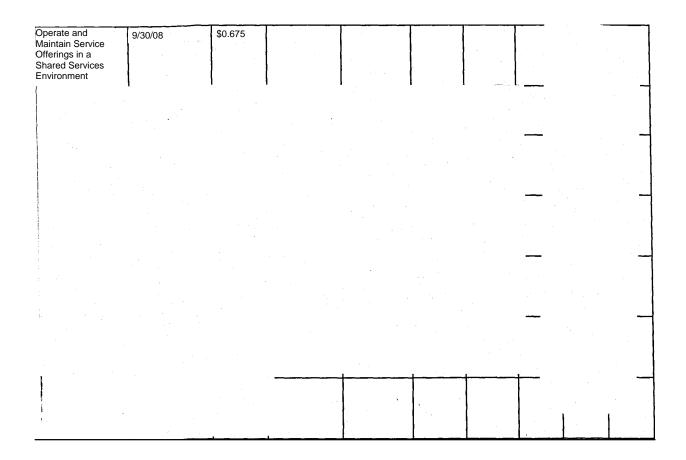
e. "As of" Date:

09/11/2006

- 3. What is the calculated Schedule Performance Index (SPI= EV/PV)? 0
- 4. What is the schedule variance (SV = EV-PV)? \$0
- 5. What is the calculated Cost Performance Index (CPI = EV/AC)? 0.000
- 6. What is the cost variance (CV = EV AC)? \$0.000
- 7. Is the CV or SV greater than plus or minus (+ -) 10%? no
  - a. If "yes," was it the CV, SV, or Both?
  - b. If "yes," explain the variance:
  - c. If "yes," what corrective actions are being taken?
  - d. What is the most current "Estimate at Completion"? \$0.000
- 8. Have significant changes been made to the baseline during the past fiscal year? no
  - a. If "yes" when was it approved by OMB?

9. 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 Milestone" and "Percent Complete" fields are required. Indicate "0" for any milestone no longer active.

	Initial Baseline		Current Baseline				CurrentCurrent BaselineBaseline		Actual Percent
Description of Milestone	Planned Completion Date	Total Costs (\$M) Estimated	Completion Date Planned	Completion Date Actual	Total Costs (\$M) Planned	Total Costs (\$M) Actual	Schedule Variance (# days)	<b>Cost</b> Variance	Complete
Develop and Pilot service offerings	9/30/07	\$7.718							0
Develop and Pilot Service Offerings	9/30/08	\$7.006							0
Deploy Service Offerings in a Shared Services Environment	9/30/08	\$7.224							0



Total Planned Costs: \$0.000

Total Actual Costs: \$0.000