BY09 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.

Submission Date Time:
09/08/2007

Submission Id: 4,391

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:	2007-09-10-04:00
(2) Agency:	422
(3) Bureau:	00
(4) Name of this Capital Asset: (250 Character Max)	GMLoB Research.gov
(5) Unique ID (Unique Project Identifier):	422-00-01-04-01-1361-24
Format xxx-xx-xx-xx-xx-xxxx-xx (For IT investments only, see section *53*. For all other, use agency ID system.)	
(6) What kind of investment will this be in FY2009?	Multi-Agency Collaboration
(7) What was the first budget year this investment was submitted to OMB?	FY2008

(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)

Continuing its 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 customers, and leadership role in the grants community. In an ongoing effort to meet community requirements, NSF is developing a single web portal, Research.gov, containing government-wide resources and tools for research institutions to conduct grants business with Federal research agencies. The portal enhances grantee access to the government and reduces government-wide spending on research grants infrastructure. Initial tools include: Application Status ? Site where applicants check status of applications submitted to participating agencies; Content Management System ? Tool that provides management of and access to multi-agency content, offers educational benefits, and increases awareness of government resources; includes a cross-agency grant policy library and a tool to highlight research discoveries; Federal Financial Report ? Tool to complete and submit the government-wide report; FFATA Award Search ? Discloses research grant award and sub-award data in compliance with the Federal Funding Accountability and Transparency (FFATA) Act of 2006; Payments and Cash Requests ? Tool to request funds disbursement and payment; PDF Conversion ? Tool for grants document conversion; Research Performance Progress Reports ? Tool to complete research project reports using a standard government-wide format. Federal research agencies will sign up to offer these services to grantees, and NSF will recover costs through a fee-for-service 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 allowed principal investigators to check the status of their CSREES and NSF proposals at one site. NSF has received very 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?	2007-08-20-04:00
(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

(11a) What is the current FAC-P/PM certification level of the project/program manager?
Senior/Expert-level

(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)?	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?	Select...
[2] If "yes," will this investment meet sustainable design principles?	Select...
[3] If "yes," is it designed to be 30% more energy efficient than relevant code?	Select...

(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?	Select...
(b) If "yes," what is the name of the PARTed program ?	
(c) If "yes," what rating did the PART receive?	Select...

(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):	(1) Project manager has been validated as qualified for this investment
(18) Is this investment identified as "high risk" on the Q4 - FY 2007 agency high risk report (per OMB's Memorandum M-05-23)?	yes
(19) Is this a financial management system?	no
(a) If "yes," does this investment address a FFMIA compliance area?	Select...
[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 FY2008 funding request for the following? (This should total 100%)

Hardware %:	Software %:	Services %:	Other %:	Total %
20	10	70	0	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 Privacy Act Officer
E-Mail:	ljensen@nsf.gov

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

(24) Does this investment directly support one of the GAO High Risk Areas? no

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 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)
All amounts represent Budget Authority (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 & Earlier (Spending Prior to 2007)	PY 2007	CY 2008	BY 2009	BY +1 2010	BY+2 2011	BY+3 2012	BY+4 2013 and beyond	Total
Planning	$0.000	$2.315	$2.648	$1.470					
Acquisition	$0.000	$5.403	$11.582	$5.939					
Subtotal Planning & Acquisition	$0.000	$7.718	$14.230	$7.409					
Operations & Maintenance	$0.000	$0.000	$0.675	$2.591					
TOTAL	$0.000	$7.718	$14.905	$10.000					
Government FTE Costs should not be included in the amounts provided above.									
Government FTE Costs	$0.000	$1.106	$1.628	$1.985					
Number of FTE represented by cost	0	6	7	7					

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?

This project will require NSF to hire a total of seven additional FTEs. NSF hired two FTEs in PY 2007 and will hire two additional FTEs in CY 2008, two in BY 2009, and one in BY 2010.

(3) If the summary of spending has changed from the FY2008 President's budget request, briefly explain
those changes.

The scope of Research.gov has increased as the result of new legislative mandates such as the Federal Funding Accountability and Transparency Act and agency requirements for public information dissemination. To address this increased scope, Research.gov plans to take a more conservative, phased approach to develop, pilot, and implement services to assure alignment with legislative mandates as they are more fully defined. This more conservative approach also results from GMLOB?s holding pattern in FY07. The summary of spending reflects this more phased approach with a decrease in development costs in CY 2008 and BY 2009 and an increase in development costs in 2010.

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: Booz Allen Hamilton Contract No: 0733650 Type of Contract/TO Used: T&M
Has the Contract Being Awarded: yes
Contract Actual/Planned Award Date:
03/30/2007
Contract/TO Start Date:
04/01/2007
Contract/TO End Date:
04/01/2009
Contract/TO Total Value ($M): $27.200 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: Steven Strength
CO Contact Information (Phone/Email): 703-292-4567 / sstrength@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) Select...

Contract or Task Order Number: Hosting Provider -- TBD Type of Contract/TO Used: CPFF
Has the Contract Being Awarded: no
Contract Actual/Planned Award Date:
09/30/2007
Contract/TO Start Date:
Contract/TO End Date:
Contract/TO Total Value ($M): $1.800 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: Steven Strength
CO Contact Information (Phone/Email): 703-292-4567 / sstrength@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) Select...

Contract or Task Order Number: SRA Touchstone Contract No: GS23F9806H Type of Contract/TO Used: T&M
Has the Contract Being Awarded: yes
Contract Actual/Planned Award Date:
01/01/2007
Contract/TO Start Date:
01/01/2007
Contract/TO End Date:
06/01/2008
Contract/TO Total Value ($M): $0.500 Inter Agency Acquisition: no
Performance Based Contract: no
Competitively Awarded Contract: no
Alternative Financing: NA EVM Required: no
Security Privacy Clause: yes

Contracting Officer (CO) Contact Information:

CO Name: Steven Strength
CO Contact Information (Phone/Email): 703-292-4567 / sstrength@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) Select...

(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 is not required for Contract Number: GS23F9806 (SRA Touchstone) because the contract is for program management and is not related to IT development.

(3) Do the contracts ensure Section 508 compliance? yes
Section 508 Compliance Explanation:

(4) Is there an acquisition plan which has been approved in accordance with agency requirements?
yes
(a) If "yes", what is the date?

(b) If "no," will an acquisition plan be developed? yes

[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 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 FY 2009.

Fiscal Year	Strategic Goal(s) Supported	Measurement Area IT	Measurement Grouping IT	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
2008	Stewardship	Mission and Business Results	Scientific and Technological Research and Innovation	# of Grants Management service offerings	0	3	
2008	Stewardship	Customer Results	Customer Satisfaction	Grantee Satisfaction	0	60%	
2008	Stewardship	Customer Results	New Customers and Market Penetration	# of Partners using offerings	0	2	
2008	Stewardship	Processes and Activities	Participation	# of Registered Users	0	2,000	
2008	Stewardship	Technology	Availability	Portal Uptime	0	99%	
2009	Stewardship	Mission and Business Results	Scientific and Technological Research and Innovation	# of Grants Management service offerings	3	4	
2009	Stewardship	Customer Results	Customer Satisfaction	Grantee Satisfaction	60%	65%	
2009	Stewardship	Customer Results	New Customers and Market Penetration	# of Partners using offerings	2	3	
2009	Stewardship	Processes and Activities	Participation	# of Registered Users	2,000	5,000	
2009	Stewardship	Technology	Availability	Portal Uptime	99%	99.5%	
2010							

2010			
2010			
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2012			

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).

For existing Mixed-Life Cycle investments where enhancement, development, and/or modernization is planned, include the investment in both the "Systems in Planning" table (Table 3) and the "Operational Systems" table (Table 4). Systems which are already operational, but have enhancement, development, and/or modernization activity, should be included in both Table 3 and Table 4. Table 3 should reflect the planned date for the system changes to be complete and operational, and the planned date for the associated C&A update. Table 4 should reflect the current status of the requirements listed. In this context, information contained within Table 3 should characterize what updates to testing and documentation will occur before implementing the enhancements; and Table 4 should characterize the current state of the materials associated with the existing system.

All systems listed in the two security tables should be identified in the privacy table. The list of systems in the "Name of System" column of the privacy table (Table 8) should match the systems listed in columns titled "Name of System" in the security tables (Tables 3 and 4). For the Privacy table, it is possible that there may not be a one-to-one ratio between the list of systems and the related privacy documents. For example, one PIA could cover multiple systems. If this is the case, a working link to the PIA may be listed in column (d) of the privacy table more than once (for each system covered by the

PIA).

The questions asking whether there is a PIA which covers the system and whether a SORN is required for the system are discrete from the narrative fields. The narrative column provides an opportunity for free text explanation why a working link is not provided. For example, a SORN may be required for the system, but the system is not yet operational. In this circumstance, answer "yes" for column (e) and in the narrative in column (f), explain that because the system is not operational the SORN is not yet required to be published.

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: 10.0

(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 System?	Planned Operational Date	Planned or Actual C&A Completion Date
Research Portal	Contractor and Government	12/31/2007	11/30/2007

(4) Operational Systems - Security:

Name Of System	Agency Or Contractor Operated system	NIST FIPS 199 Risk Impact Level (High, Moderate, Low)	Has the C&A been completed using NIST 800-37?	Date C&A Complete	What standards we used for the Security Controls tests?	Date Completed Security Control Testing	Date Contingency Plan Tested

(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? Select...

(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?

NSF?s Division of Information security team will conduct annual security control reviews. NSF uses a range of methods to review the security of operations through contract requirements, project management oversight and review, certification and accreditation processes, IG independent reviews, proactive testing of controls through penetration testing and vulnerability scans to ensure services are adequately secure and meet the requirements of FISMA, OMB policy, NIST guidelines and NSF policy.The system is operated on-site by a team of contractors and NSF personnel with system administrators tightly controlling access to the systems. Only administrators with current need have access to the system, and strict code migration, quality control, and configuration management procedures prevent deployment of hostile or vulnerable software on the systems. Contractors are trained in the same security measures as NSF employees. All NSF employees and contract staff are required to complete an on-line security training class each year, including the rules of behavior. Background checks are done routinely as a part of the NSF contracting process, and IT security requirements are stated in the contract's statement of work. Contractor security procedures are monitored, verified, and validated by the agency in the same way as for government employees. Once on board, contractors are allowed access to the NSF systems based on their specific job requirements. Audit logs are also implemented to monitor operating system changes - these audit logs are reviewed regularly by the system administrators. Additionally, roles and responsibilities are separated to the extent possible to allow for checks and balances in system management and multiple levels of oversight.

(8) Planning and Operational Systems - Privacy Table:

(a) Name Of System	(b) Is this a new system?	(c) Is there atleast one PIA which covers this system? (Y/N)	(d) Internet Link or Explanation	(e) Is a System Records Notice (SORN) required for this system?	(f) Internet Link or Explanation
Research Portal	yes	no	This system is not yet operational, but the PIA is in progress in anticipation of operations. The planned date for PIA completion is November 30, 2007. The PIA will be posted on Research.gov when it is operational.	yes	This system is not yet operational, but the SORN is in progress in anticipation of operations. The SORN will be posted to the Federal Register on October 15, 2007.

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? 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.	GMLOB Research.gov
b. If "no," please explain why?	

3. Is this investment identified in a completed (contains a target architecture) and approved segment architecture?
yes

a. If "yes," provide the name of the segment architecture asprovided in the agency's most recent annual EA Assessment.
Grants Management

(4) 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	FEASRM Service Type	FEA SRM Component (a)	FEA Service Component Reused (b)		Internal External Reuse (c)	Funding Percentage (d)
				Reused Service Component Name	Reused Service Component UPI		
Application Status	Tool to facilitate timely communication between grantees and agencies by allowing them to check on the up-to-date status of proposals as agencies review and	Data Management	Loading and Archiving	Select...		No Reuse	8

	receive them.						
Content Management System	Tool that provides easier management of and greater access to multi-agency content, offers educational benefits, and increases awareness of government resources; including: a cross-agency grant policy library, and a tool to highlight research discoveries	Content Management	Content Publishing and Delivery	Select...		No Reuse	1
Federal Financial Report (FFR)	Service that simplifies financial reporting requirements by providing user-friendly financial management forms that are pre-populated and can be downloaded in MS Excel, allowing grantees to cut and paste financial information	Knowledge Management	Knowledge Capture	Select...		No Reuse	7
FFATA Award Search	Service that helps provide transparency and accountability for government funds, while increasing the ease with which the research community can find grants information by providing a single location for conducting research grants searches	Search	Classification	Select...		No Reuse	5
Payment and Cash Requests	Service that serves as a one-stop payment and cash request tool, allowing grantees to request and receive payments for participating agencies in one location	Financial Management	Payment / Settlement	Select...		No Reuse	19
PDF File Conversion	Tool to easily convert file attachments to the format required for government acceptance	Document Management	Document Conversion	Select...		No Reuse	2
Research Performance Progress Reports	Service which provides an automated mechanism for submission and review of research project performance reports and creates standardization in government forms	Knowledge Management	Knowledge Capture	Select...		No Reuse	25
Research Portal	Portal that provides grantees with modern online capabilities for conducting grant business with federal research agencies	Knowledge Management	Knowledge Distribution and Delivery	Select...		No Reuse	27

a. Use existing SRM Components or identify as "NEW". A "NEW" component is one not already identified as a service component in the FEA SRM.

b. A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

c. 'Internal' reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. 'External' reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

d. Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in

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

5. 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	FEAService Specification (b)
Loading and Archiving	Service Interface and Integration	Integration	Middleware	BEA Web Logic Application Server
Loading and Archiving	Service Interface and Integration	Interface	Web Servers	BEA Portal Server, Apache Web Server
Loading and Archiving	Service Platform and Infrastructure	Database / Storage	Database	SUN JES Directory, MS Access, Oracle 10g
Loading and Archiving	Service Interface and Integration	Database / Storage	Storage	SUN JES Directory, MS Access, Oracle 10g
Document Conversion	Service Access and Delivery	Access Channels	Web Browser	Microsoft Internet Explorer
Document Conversion	Service Access and Delivery	Delivery Channels	Extranet	Sun JES Service Registry
Document Conversion	Service Platform and Infrastructure	Support Platforms	Platform Independent	Apache
Document Conversion	Service Platform and Infrastructure	Delivery Servers	Portal Servers	BEA
Document Conversion	Service Platform and Infrastructure	Delivery Servers	Application Servers	BEA Web Logic
Document Conversion	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Not Specified
Document Conversion	Component Framework	Presentation / Interface	Dynamic Server-Side Display	Apache, BEA
Document Conversion	Component Framework	Data Interchange	Data Exchange	J2SE, J2EE, EJB, XML, XSLT
Document Conversion	Service Interface and Integration	Integration	Middleware	BEA Web Logic Application Server
Document Conversion	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Knowledge Capture	Service Access and Delivery	Access Channels	Web Browser	Microsoft Internet Explorer
Knowledge Capture	Service Access and Delivery	Delivery Channels	Extranet	SUN JES Service Registry
Knowledge Capture	Service Platform and Infrastructure	Delivery Servers	Portal Servers	BEA
Knowledge Capture	Service Platform and Infrastructure	Delivery Servers	Application Servers	BEA Web Logic
Knowledge Capture	Service Platform and Infrastructure	Support Platforms	Platform Independent	Apache
Knowledge Capture	Service Platform and Infrastructure	Database / Storage	Database	SUN JES Directory, MS Access, Oracle 10g
Knowledge Capture	Service Platform and	Hardware / Infrastructure	Servers / Computers	Not Specified

	Infrastructure			
Knowledge Capture	Component Framework	Presentation / Interface	Dynamic Server-Side Display	Apache, BEA
Knowledge Capture	Component Framework	Business Logic	Platform Independent	Apache
Knowledge Capture	Component Framework	Data Interchange	Data Exchange	J2SE, J2EE, EJB, XML, XSLT
Knowledge Capture	Component Framework	Data Management	Database Connectivity	J2SE, J2EE, EJB, XML, XSLT
Knowledge Capture	Component Framework	Data Management	Reporting and Analysis	N/A
Knowledge Capture	Service Interface and Integration	Integration	Middleware	BEA Web Logic Application Server
Knowledge Capture	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Knowledge Capture	Service Interface and Integration	Interoperability	Data Types / Validation	J2SE, J2EE, EJB, XML, XSLT
Knowledge Capture	Service Interface and Integration	Interoperability	Data Transformation	J2SE, J2EE, EJB, XML, XSLT
Knowledge Capture	Service Interface and Integration	Interface	Service Discovery	JSP, HTML, CSS
Knowledge Distribution and Delivery	Service Access and Delivery	Access Channels	Web Browser	Microsoft Internet Explorer
Knowledge Distribution and Delivery	Service Access and Delivery	Delivery Channels	Extranet	SUN JES Service Registry
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Delivery Servers	Portal Servers	BEA
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Delivery Servers	Application Servers	BEA Web Logic
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Support Platforms	Platform Independent	Apache
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Database / Storage	Database	SUN JES Directory, MS Access, Oracle 10g
Knowledge Distribution and Delivery	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Not Specified
Knowledge Distribution and Delivery	Component Framework	Presentation / Interface	Dynamic Server-Side Display	Apache, BEA
Knowledge Distribution and Delivery	Component Framework	Business Logic	Platform Independent	Apache
Knowledge Distribution and Delivery	Component Framework	Data Interchange	Data Exchange	J2SE, J2EE, EJB, XML, XSLT
Knowledge Distribution and Delivery	Component Framework	Data Management	Database Connectivity	J2SE, J2EE, EJB, XML, XSLT
Knowledge Distribution and Delivery	Component Framework	Data Management	Reporting and Analysis	N/A
Knowledge Distribution and Delivery	Service Interface and Integration	Integration	Middleware	BEA Web Logic Application Server
Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Format / Classification	TBD
Knowledge Distribution and Delivery	Service Interface and Integration	Interoperability	Data Types / Validation	J2SE, J2EE, EJB, XML, XSLT
Knowledge Distribution	Service Interface and	Interoperability	Data Transformation	J2SE, J2EE, EJB, XML, XSLT

and Delivery	Integration			
Knowledge Distribution and Delivery	Service Interface and Integration	Interface	Service Discovery	JSP, HTML, CSS
Payment / Settlement	Service Access and Delivery	Access Channels	Web Browser	Microsoft Internet Explorer
Payment / Settlement	Service Access and Delivery	Delivery Channels	Extranet	SUN JES Service Registry
Payment / Settlement	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on	BEA Portal Server
Payment / Settlement	Service Platform and Infrastructure	Support Platforms	Platform Independent	Apache
Payment / Settlement	Service Platform and Infrastructure	Delivery Channels	Portal Servers	BEA
Payment / Settlement	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Not Specified
Payment / Settlement	Service Platform and Infrastructure	Database / Storage	Database	SUN JES Directory, MS Access, Oracle 10g
Payment / Settlement	Component Framework	Security	Certificates / Digital Signatures	BEA Portal Server
Payment / Settlement	Component Framework	Security	Supporting Security Services	SUN JES Identity Manager, SUN JES Access Manager, SAML, SSL
Payment / Settlement	Component Framework	Presentation / Interface	Dynamic Server-Side Display	Apache, BEA
Payment / Settlement	Component Framework	Business Logic	Platform Independent	Apache
Payment / Settlement	Component Framework	Data Interchange	Data Exchange	J2SE, J2EE, EJB, XML, XSLT
Payment / Settlement	Component Framework	Data Management	Database Connectivity	J2SE, J2EE, EJB, XML, XSLT
Payment / Settlement	Service Interface and Integration	Integration	Middleware	BEA Web Logic Application Server
Query	Service Access and Delivery	Access Channels	Web Browser	Microsoft Internet Explorer
Query	Service Access and Delivery	Delivery Channels	Extranet	SUN JES Service Registry
Query	Service Platform and Infrastructure	Delivery Servers	Portal Servers	BEA
Query	Service Platform and Infrastructure	Delivery Servers	Application Servers	BEA Web Logic
Query	Service Platform and Infrastructure	Support Platforms	Platform Independent	Apache
Query	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	Not Specified
Query	Component Framework	Presentation / Interface	Dynamic Server-Side Display	Apache, BEA
Query	Component Framework	Business Logic	Platform Independent	Apache
Query	Component Framework	Data Interchange	Data Exchange	J2SE, J2EE, EJB, XML, XSLT
Query	Component Framework	Data Management	Database Connectivity	J2SE, J2EE, EJB, XML, XSLT
Query	Component Framework	Data Management	Reporting and Analysis	N/A
Query	Service Interface and Integration	Integration	Middleware	BEA Web Logic Application Server
Query	Service Interface and	Interoperability	Data Format / Classification	TBD

	Integration			
Query	Service Interface and Integration	Interoperability	Data Types / Validation	J2SE, J2EE, EJB, XML, XSLT
Query	Service Interface and Integration	Interface	Service Discovery	JSP, HTML, CSS

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., 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. Research.gov will also leverage the Central Contractor Registration (CCR) database for verifying applicants? identities and submissions. This will help standardize grants management processes and identifiers across federal agencies. Research.gov will also use Grants.gov?s ?Find and Apply.?

PART IV: Planning for "Multi-Agency Collaboration" ONLY

Part IV should be completed only for investments identified as an E-Gov initiative, a Line of Business (LoB), or a Multi-Agency Collaboration effort. The "Multi-Agency Collaboration" choice should be selected in response to Question 6 in Part 1, Section A above. Investments identified as "Multi-Agency Collaboration" will complete only Parts I and IV of the Exhibit 300.

Section A: Multi-Agency Collaboration Oversight (All Capital Assets)

Multi-agency Collaborations, such as E-Gov and LOB initiatives, should develop a joint exhibit 300.

1. Stakeholder Table: As a joint exhibit 300, please identify all the agency stakeholders (all participating agencies, this should not be limited to agencies with financial commitment). All agency stakeholders should be listed regardless of approval. If the partner agency has approved this joint exhibit 300 please provide the date of approval.

Partner Agency	Joint Exhibit Approval Date
005	08/31/2007

3. For jointly funded initiative activities, provide in the "Partner Funding Strategies Table": the name(s) of partner agencies; the UPI of the partner agency investments; and the partner agency contributions for CY and BY. Please indicate partner contribution amounts (in-kind contributions should also be included in this amount) and fee-for-service amounts. (Partner Agency Asset UPIs should also appear on the Partner Agency's exhibit 53. For non-IT fee-for-service amounts the Partner exhibit 53 UPI can be left blank) (IT migration investments should not be included in this table)

Partner Funding Strategies ($ Millions)					
Agency	Partner Exhibit 53 UPI	CY Contribution	CY Fee For Service	BY Contribution	BY Fee For Service
005		$0.000	$0.000	$0.000	$0.000

An alternatives analysis for multi-agency collaborations should also be obtained. At least three viable alternatives, in addition to the current baseline (i.e. status quo), should be included in the joint exhibit 300. 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.

4. Did you conduct an alternatives analysis for this project? yes

a. If "yes," what is the date of the analysis?

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

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

5. Use the results of your alternative analysis to complete the following table:

Alternative Analyzed	Description of Alternative	Risk Adjusted Lifecycle Costs Estimate	Risk Adjusted Lifecycle Benefits Estimate
Baseline	Status quo ? This alternative involves offering no government-wide services. NSF continues to upgrade and maintain selected Grants Management systems for internal purposes only. The Lifecycle costs and benefits for this alternative are zero because the O&M costs for these internal NSF services are captured in other OMB Exhibit 300s. The costs for the other alternatives do not include these internal NSF O&M costs.	$0.000	$0.000
1 -- Limited Offerings, no portal	This alternative includes NSF offering the following government-wide services to select partners: Application Status, Federal Financial Report, and PDF Conversion. This alternative does not include a portal component.	$14.096	$120.682
2 -- Portal with initial offerings	This alternative involves developing one location for the Research community (grantees, institutions, and agencies) to manage the grants process; includes limited functionality to select partners. The initial government-wide components include: Research Portal, Application Status, Project Reports, Federal Financial Report, PDF Conversion, Payments and Cash Requests and R&R Enhanced Find. Other offerings will be added in time, by NSF as well as other research organizations.	$61.138	$566.043
3 -- End-to-End solution	This alternative involves developing a new end-to end system for government-wide grants management and delivering it en masse as opposed to incrementally as in alternative 2. This system would include all aspects of grants management.	$137.441	$1,097.247

6. Which alternative was selected by the Initiative Governance Process and why was it chosen?

Alternative 2 is the selected alternative, offering greatest benefit for moderate cost and risk. It will give the research community a single location to access grants information, streamline the grants process, and reduce the need for infrastructure. It has the highest ROI based on cost and benefit calculations. Risks are minimized through a modular approach that allows for gradual deployment of applications based on the needs of the partners and the grantee community.

7. 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.

8. What specific quantitative benefits will be realized (using current dollars)?

Benefit Year	Budgeted Cost Savings	Cost Avoidance	Justification For Budgeted Cost Savings	Justification For Cost Avoidance
BY+4 and Beyond	$0.000	$16,751,547.000		

9. 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:

Name Of Legacy System	Legacy UPI	Date Of Retirement
As Research.gov service offerings mature, NSF will decommission any redundant legacy capability (e.g., FastLane?s Proposal Status and Research Performance Progress Reports).	422-00-04-00-01-0028-00	09/30/2011

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.

Answer the following questions to describe how you are managing investment risks.

1. Does the investment have a Risk Management Plan? yes
a. If "yes," what is the date of the plan?
07/31/2007
b. Has the Risk Management Plan been significantly changed since the last year's submission to OMB? yes
c. If "yes," describe any significant changes:
It is a new plan.

2. If there is currently no plan, will a plan be developed? Select...
a. If "yes," what is the date of the plan?
b. If "no," what is the strategy for managing the risks?

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

You should also periodically be measuring the performance of operational assets against the baseline established during the planning or full acquisition phase (i.e., operational analysis), and be properly operating and maintaining the asset to maximize its useful life. Operational analysis may identify the need to redesign or modify an asset by identifying previously undetected faults in design, construction, or installation/integration, highlighting whether actual operation and maintenance costs vary significantly from budgeted costs, or documenting that the asset is failing to meet program requirements.

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.

Answer the following questions about the status of this investment. Include information on all appropriate capital assets supporting this investment except for assets in which the performance information is reported in a separate exhibit 300.

1. Are you using EVM to manage this investment? yes

a. If "yes," does the earned value management system meet the criteria in ANSI/EIA Standard – 748? yes

b. If "no," explain plans to implement EVM:

c. If "N/A," please provide date operational analysis was conducted and a brief summary of the results?

2. Is the CV or SV greater than plus/minus (+-)10%? no

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

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

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

Questions #3-4 are applicable to ALL capital assets.

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.

Comparison of Initial Baseline and Current Approved Baseline

Description of Milestone	Initial Baseline		Current Baseline				Current Baseline Variance		Actual % Comp	Agency
	Planned Completion Date	Total Cost ($M) Estimated	Completion Date - Planned	Completion Date - Actual	Total Cost ($M) Planned	Total Cost ($M) Actual	Sched Var (# days)	Cost Var ($M)		
Develop and pilot service offerings	9/30/07	$7.718	9/30/07	9/17/07	$7.718	$7.700	13	$0.018	100.0	422
Develop and pilot service offerings	9/30/08	$7.006	9/30/08		$7.006	$0.000	0	$0.000	0.0	422
Deploy service offerings in a shared services environment	9/30/08	$7.224	9/30/08		$7.224	$0.000	0	$0.000	0.0	422
Operate and maintain service offerings in a shared services environment	9/30/08	$0.675	9/30/08		$0.675	$0.000	0	$0.000	0.0	422
Deploy service offerings in a shared services environment	9/30/09	$7.409	9/30/09		$10.421	$0.000	0	$0.000	0.0	422
Operate and maintain service offerings in a shared services environment	9/30/09	$2.591	9/30/09		$4.246	$0.000	0	$0.000	0.0	422
Perform Ongoing Development, Modernization, ar Enhancement (DME) Activities										
Operate and Maintain Service Offerings in a Shared Services Environment										
Operate and Maintain Servic Offerings in a Shared Services Environment										
Operate and Maintain Service Offerings in a Shared Services Environment										