

**Exhibit 300 (BY2009)**

<b>PART ONE</b>	
<b>OVERVIEW</b>	
<b>1. Date of Submission:</b>	2007-09-07
<b>2. Agency:</b>	026
<b>3. Bureau:</b>	00
<b>4. Name of this Capital Asset:</b>	NASA Data Center
<b>5. Unique Project Identifier:</b>	026-00-02-00-01-0002-00
6. What kind of investment will this be in FY2009?	
Mixed Life Cycle	
7. What was the first budget year this investment was submitted to OMB?	
FY2009	
8. Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap.	
<p>The NASA Data Center provides operations and technical support for computing requirements. It represents the consolidation of several center data centers distributed across the NASA Centers to provide a centralized, cost effective environment for providing both Mission and Mission Support IT computing capabilities. The data center provides services to all 10 NASA centers, three of the four Mission Directorates, and five of the Mission Support Organizations (MSO's). The initial mainframe consolidation resulted in significant savings to the agency. This initial success lead to the further consolidation of all 10 centers institutional mainframe operations and the closure of the Slidell Computing Complex supporting Shuttle Main Tank manufacturing. In 2004, non-mainframe CIO agency-wide systems were included and the NASA ADP Consolidation Center was renamed NASA Data Center expanding services beyond the mainframe. The NDC Enterprise Architecture documented the AS-IS framework aligning the Services with the business requirements.</p>	
9. Did the Agency's Executive/Investment Committee approve this request?	
yes	
9.a. If "yes," what was the date of this approval?	
2007-06-19	
10. Did the Project Manager review this Exhibit?	
yes	
11. Project Manager Name:	
Randy Sparkman	
Project Manager Phone:	
(256) 544-2997	
Project Manager Email:	
Randy.Sparkman@nasa.gov	
11.a. What is the current FAC-P/PM certification level of the project/program manager?	
Mid/Journeyman-level	
12. Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project.	
yes	
12.a. Will this investment include electronic assets (including computers)?	
yes	
12.b. Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)	
no	

13. Does this investment directly support one of the PMA initiatives?	
no	
If yes, select the initiatives that apply:	
Expanded E-Government	
13.a. Briefly and specifically describe for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-Gov is selected, is it an approved shared service provider or the managing partner?)	
NASA consolidated 10 data centers into the NASA Data Center (NDC) saving millions of hardware, software and labor cost. As the E-Gov managing partner the NASA OCIO provides the computing infrastructure used by the Shuttle Program to manufacture the Main Tank in support of missions which include international partners. Systems are evaluated to provide standard capabilities meeting dynamic NASA requirements and support the automation of internal processes to improve performance and reduce cost.	
14. Does this investment support a program assessed using the Program Assessment Rating Tool (PART)?	
no	
15. Is this investment for information technology?	
yes	
16. What is the level of the IT Project (per CIO Council's PM Guidance)?	
Level 2	
17. What project management qualifications does the Project Manager have? (per CIO Council's PM Guidance)	
(2) Project manager qualification is under review for this investment	
18. Is this investment identified as high risk on the Q4 - FY 2007 agency high risk report (per OMB memorandum M-05-23)?	
no	
19. Is this a financial management system?	
no	
19.a.1. If yes, which compliance area:	
N/A	
19.a.2. If no, what does it address?	
The investment addresses provisioning basic Information Technology Services hosting, housing, scheduling, printing, backup and other infrastructure services supporting both Mission and Mission Support activities.	
19.b. If yes, please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A11 section 52.	
N/A	
20. What is the percentage breakout for the total FY2008 funding request for the following? (This should total 100%)	
<b>Hardware</b>	12
<b>Software</b>	20
<b>Services</b>	7
<b>Other</b>	61
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	
Bessie Whitaker	
Phone Number	
(256) 544-4812	
Title	
Security Manager	

Email

Bessie.H.Whitaker@nasa.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

**SUMMARY OF SPEND**

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.

All amounts represent Budget Authority

	PY 2007	CY 2008	BY 2009
<b>Planning Budgetary Resources</b>	0.000	0.000	0.000
<b>Acquisition Budgetary Resources</b>	3.084	3.489	3.485
<b>Maintenance Budgetary Resources</b>	17.044	16.980	19.559
<b>Government FTE Cost</b>	0.421	0.619	0.640
<b># of FTEs</b>	3	5	5

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?

no

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

N/A

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

The Summary of Spending has not changed from the FY2008 President's budget request. This submission represents the first year that the NDC has been considered a NASA Major IT Investment and as such, this is the first Exhibit 300 submission.

**PERFORMANCE**

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency's mission and strategic goals, and performance measures (indicators) must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding Measurement Area and Measurement Grouping identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov. The table can be extended to include performance measures for years beyond FY 2009.

	Fiscal Year	Strategic Goal Supported	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
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	<b>Fiscal Year</b>	<b>Strategic Goal Supported</b>	<b>Measurement Area</b>	<b>Measurement Grouping</b>	<b>Measurement Indicator</b>	<b>Baseline</b>	<b>Planned Improvement to the Baseline</b>	<b>Actual Results</b>
<b>1</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Mission and Business Results	IT Infrastructure Maintenance	Establish Service Level Agreements with customers for all services hosted at the NASA Data Center	50 % of hosted services have approved SLA's in place	65% of hosted services to have signed SLA's	TBD Actual Results expected mid October
<b>2</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Mission and Business Results	IT Infrastructure Maintenance	Provide IT operations and maintenance support for mainframe, midrange, infrastructure (SAN, Active Directory, etc.) and application development services in support of NASA's mission.	Increase service customer density from previous years baseline	Increase by 2%	TBD Actual Results expected mid October
<b>3</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Customer Results	Customer Satisfaction	Improved customer satisfaction in each service cluster, including: Accuracy of service or product delivered, delivery time, and service coverage	Determined by results of FY06 customer satisfaction survey	Goal is 98% or higher	TBD Actual Results expected mid October
<b>4</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Customer Results	Availability	% of time that services outages are restored in accordance with published service levels	99.9%	Goal GT 99.5%	TBD Actual Results expected mid October
<b>5</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Processes and Activities	Participation	Expand business base by providing price competitive quality services	Increase business base over 2006 baseline	Increase by 5% based on service units	TBD Actual Results expected mid October

	<b>Fiscal Year</b>	<b>Strategic Goal Supported</b>	<b>Measurement Area</b>	<b>Measurement Grouping</b>	<b>Measurement Indicator</b>	<b>Baseline</b>	<b>Planned Improvement to the Baseline</b>	<b>Actual Results</b>
<b>6</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Processes and Activities	Timeliness	Average time to respond to users problems logged through the help Desk	100%	Return to Service in 2 hours or less	TBD Actual Results expected mid October
<b>7</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Technology	Load levels	Mainframe Service Demand Is Tracked by the CPU, DASD & Tape.	100%	100%	TBD Actual Results expected mid October
<b>8</b>	2007	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Technology	Compliance and Deviations	% of hosted applications with approved Security Plans	100%	100%	TBD Actual Results expected mid October
<b>9</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Mission and Business Results	IT Infrastructure Maintenance	Establish Service Level Agreements with customers for all services hosted at the NASA Data Center	65 % of hosted services have approved SLA's in place	85% of hosted services to have signed SLA's	TBD
<b>10</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Mission and Business Results	IT Infrastructure Maintenance	Provide IT operations and maintenance support for mainframe, midrange, infrastructure (SAN, Active Directory, etc.) and application development services in support of NASA's mission.	Increase service customer density from previous years baseline	Increase by 5%	TBD

	<b>Fiscal Year</b>	<b>Strategic Goal Supported</b>	<b>Measurement Area</b>	<b>Measurement Grouping</b>	<b>Measurement Indicator</b>	<b>Baseline</b>	<b>Planned Improvement to the Baseline</b>	<b>Actual Results</b>
<b>11</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Customer Results	Customer Satisfaction	Improved customer satisfaction in each service cluster, including: Accuracy of service or product delivered, delivery time, and service coverage	Determined by results of FY06 customer satisfaction survey	Goal is 98% or higher	TBD
<b>12</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Customer Results	Availability	% of time that services outages are restored in accordance with published service levels	TBD based on 2007 actual results current projection is 99.9%	Goal GT 99.5%	TBD
<b>13</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Processes and Activities	Participation	Expand business base by providing price competitive quality services	Increase business base over 2006 baseline	Increase by 5% based on service units	TBD
<b>14</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Processes and Activities	Timeliness	Average time to respond to users problems logged through the help Desk	TBD based on 2007 actual results current projection is 100%	100%	TBD
<b>15</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Technology	Load levels	Mainframe Service Demand Is Tracked by the Following Categories:	100%	100%	TBD

	<b>Fiscal Year</b>	<b>Strategic Goal Supported</b>	<b>Measurement Area</b>	<b>Measurement Grouping</b>	<b>Measurement Indicator</b>	<b>Baseline</b>	<b>Planned Improvement to the Baseline</b>	<b>Actual Results</b>
<b>16</b>	2008	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Technology	Compliance and Deviations	% of hosted applications with approved Security Plans	100%	100%	TBD
<b>17</b>	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Mission and Business Results	IT Infrastructure Maintenance	Establish Service Level Agreements with customers for all services hosted at the NASA Data Center	85 % of hosted services have approved SLA's in place	100% of hosted services to have signed SLA's	TBD
<b>18</b>	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Mission and Business Results	IT Infrastructure Maintenance	Provide IT operations and maintenance support for mainframe, midrange, infrastructure (SAN, Active Directory, etc.) and application development services in support of NASA's mission.	Increase service customer density from previous years baseline	Increase by 5%	TBD
<b>19</b>	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Customer Results	Customer Satisfaction	Improved customer satisfaction in each service cluster, including: Accuracy of service or product delivered, delivery time, and service coverage	Determined by results of FY06 customer satisfaction survey	Goal is 98% or higher	TBD
<b>20</b>	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Customer Results	Availability	% of time that services outages are restored in accordance with published service levels	TBD based on 2008 actual results current projection is 99.9%	Goal of 99.5%	TBD

	Fiscal Year	Strategic Goal Supported	Measurement Area	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvement to the Baseline	Actual Results
21	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Processes and Activities	Participation	Expand business base by providing price competitive quality services	Increase business base over 2006 baseline	Increase by 5% based on service units	TBD
22	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Processes and Activities	Timeliness	Average time to respond to users problems logged through the help Desk	TBD based on 2008 actual results current projection is 100%	100%	TBD
23	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Technology	Load levels	Mainframe Service Demand Is Tracked by the Following Categories:	100%	100%	TBD
24	2009	Goal 3: Develop a balanced overall program of science, exploration and aeronautics.	Technology	Compliance and Deviations	% of hosted applications with approved Security Plans	100%	100%	TBD

**EA**

*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

1.a. If no, please explain why?

N/A

2. Is this investment included in the agency's EA Transition Strategy?

yes

2.a. If yes, provide the investment name as identified in the Transition Strategy provided in the agency's most recent annual EA Assessment.

NASA Data Center

2.b. If no, please explain why?

N/A

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

no

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.whitehouse.gov/omb/egov/>.

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

*Reused Name and UPI: 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.*

*Internal or External Reuse?: 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.*

*Funding Percentage: 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.*

	<b>Agency Component Name</b>	<b>Agency Component Description</b>	<b>Service Type</b>	<b>Component</b>	<b>Reused Component Name</b>	<b>Reused UPI</b>	<b>Internal or External Reuse?</b>	<b>Funding %</b>
<b>1</b>	Disaster Recovery	Defines the set of capabilities that support the restoration of services and data to a pre event state.	Data Management	NEW	Data Recovery		Internal	8
<b>2</b>	Computer / Automation Management	Defines the set of capabilities that support the identification, upgrade, allocation and replacement of physical devices, including servers, storage, switches, routers, firewalls, UPS, HVAC, Air handlers, PDU's, consoles, used to facilitate production and process-driven activities.	Asset / Materials Management	NEW	Property / Asset Management		Internal	15
<b>3</b>	Facilities Management	Defines the set of capabilities that support construction and maintenance of facilities and management of the activities.	Asset / Materials Management	Facilities Management			No Reuse	1

	<b>Agency Component Name</b>	<b>Agency Component Description</b>	<b>Service Type</b>	<b>Component</b>	<b>Reused Component Name</b>	<b>Reused UPI</b>	<b>Internal or External Reuse?</b>	<b>Funding %</b>
<b>4</b>	Network Management	Defines the set of capabilities involved in maintaining and monitoring the back-end (internal) communications network and the front-end network to the WAN demarcation in order to diagnose problems, gather statistics and provide efficient and effective data communications.	Organizational Management	Network Management	Network Management		Internal	5
<b>5</b>	Access Management	Defines the set of capabilities that support the granting of access to users and groups of users to computing resources.	Security Management	Access Control	Access Control		Internal	4
<b>6</b>	System Security	Defines the set of capabilities that ensure that the automation systems are secure and in compliance with all federal and agency laws, policies and standards, development and maintenance of security plans, certification and accreditation, intrusion detection and cyber attack escalation and reporting.	Security Management	NEW	System Resource Monitoring		Internal	5
<b>7</b>	Computer / Automation Provisioning	Defines the set of capabilities that provide computing services in support of NASA Missions and Mission Support Functions	Data Management	NEW	Computers / Automation Management		Internal	63

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: 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.

Service Specification: 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.

	<b>SRM Component</b>	<b>Service Area</b>	<b>Service Category</b>	<b>Service Standard</b>	<b>Service Specification (i.e., vendor and product name)</b>
<b>1</b>	Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers	The NASA Data Center Computing Infrastructure is supported through an IT Services Contract that, using Full and Open Competition IAW the FAR, procures the Equipment, Hardware, Software and Materials required to meet the service delivery requirements
<b>2</b>	Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Embedded Technology Devices	The NASA Data Center Computing Infrastructure is supported through an IT Services Contract that, using Full and Open Competition IAW the FAR, procures the Equipment, Hardware, Software and Materials required to meet the service delivery requirements
<b>3</b>	Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Peripherals	The NASA Data Center Computing Infrastructure is supported through an IT Services Contract that, using Full and Open Competition IAW the FAR, procures the Equipment, Hardware, Software and Materials required to meet the service delivery requirements
<b>4</b>	Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Local Area Network (LAN)	The NASA Data Center Computing Infrastructure is supported through an IT Services Contract that, using Full and Open Competition IAW the FAR, procures the Equipment, Hardware, Software and Materials required to meet the service delivery requirements
<b>5</b>	Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Network Devices / Standards	The NASA Data Center Computing Infrastructure is supported through an IT Services Contract that, using Full and Open Competition IAW the FAR, procures the Equipment, Hardware, Software and Materials required to meet the service delivery requirements

6. Will the application leverage existing components and/or applications across the Government (i.e., FirstGov, Pay.Gov, etc)?
no
6.a. If yes, please describe.
N/A
<b>PART TWO</b>
<b>RISK</b>
<i>You should perform a risk assessment during the early planning and initial concept phase of the investment's life-cycle, develop 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.</i>
<i>Answer the following questions to describe how you are managing investment risks.</i>
1. Does the investment have a Risk Management Plan?
yes
1.a. If yes, what is the date of the plan?
2005-10-28
1.b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?

no

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

As a part of the NDC Project Management Plan Business Cost Model a Risk Reserve has been included as a cost element for the service elements that are not 100% labor based. This provides for out of cycle support equipment, IT hardware and the additional contracted services required to mitigate a range of risks that would result in service interruption. Further, the Risk Management Plan addresses Disaster Recovery and Continuity of Operations which are included within the costing model. NDC Service rates cover all cost elements including the Risk Reserve. Each year the reserve is reviewed and rates adjusted to ensure that there is adequate reserve to meet reasonable risk mitigation without maintaining excess reserve funds.

### **COST & SCHEDULE**

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

yes

2. Is the CV% or SV% greater than  $\hat{A} \pm 10\%$ ?

yes

2.a. If yes, was it the?

Both

2.b. If yes, explain the variance.

The bulk of the variance is associated with Software Refresh and Risk Reserve, neither of which we used in FY07. Software Refresh is a piece of the NDC rates so that buy out funds are available to move from an existing product to another through a needs based alternative analysis and prevents being locked into one solution because the only funds available are maintenance. The Risk Reserve is accumulated through a 5% uplift on labor based services and a 10% uplift on non-labor based services. these funds are held to mitigate identified and unidentified risks such as natural disasters and demands that far exceed expectations which would drive cost to exceed budget.

2.c. If yes, what corrective actions are being taken?

The NDC Business Office budgets based on the development of Provisional rates that are developed from projected customer requirements and projected costs. At the conclusion of each Fiscal Year the NDC Business Office performs a Full Cost Reconciliation to adjust rates based on actual expenses. The adjusted rates are applied to customers actual service utilization and new service statements are developed. When annual costs are greater than the budget some of the Risk Reserve is applied to cover the shortfall and when cost are less than budget the rates for the following years are adjusted to lower cost to customers.

3. Has the investment re-baselined during the past fiscal year?

no

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