

**MS Word Exhibit 300 for O&M (BY2008) (Form) / JSC Space Shuttle Program Integration (Item)**

Form Report, printed by: System Administrator, **Jan 31, 2007**

**OVERVIEW**

<b>General Information</b>	
<b>1. Date of Submission:</b>	January 31, 2007
<b>2. Agency:</b>	026
<b>3. Bureau:</b>	00
<b>4. Name of this Capital Asset:</b>	JSC Space Shuttle Program Integration
<b>Investment Portfolio:</b>	BY OMB 300 Items
<b>5. Unique ID:</b>	026-00-01-03-01-1419-00
<b>(For IT investments only, see section 53. For all other, use agency ID system.)</b>	

<b>All investments</b>
6. What kind of investment will this be in FY2008?
<i>(Please NOTE: Investments moving to O&amp;M ONLY in FY2008, with Planning/Acquisition activities prior to FY2008 should not select O&amp;M. These investments should indicate their current status.)</i>
Operations and Maintenance
7. What was the first budget year this investment was submitted to OMB?
FY2004
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>Space Shuttle Program Program Integration ( SSP PI) is one functional element of a much larger contract (Space Flight Operations Contract) to perform complete end-to-end Space Shuttle Operations including the orbiter vehicle hardware. This Exhibit 300 addresses only the specific PI element and only the information technology costs of that element (direct labor, materials and other direct IT costs) - not the entire programmatic or contractor indirect costs. Space Shuttle Program Program Integration includes elements managed by the Space Shuttle Program Office at the Johnson Space Center (JSC) and conducted primarily by United Space Alliance, including payload integration into the Space Shuttle, systems integration of the flight hardware elements through all phases of flight, and configuration management of program hardware, software, and requirements. These systems are the tools the program uses to manage and integrate the various program elements and are critical to Shuttle operations. If these systems are degraded or non-operational, safety and reliability can be greatly affected.</p> <p>The information technology parts of SSP PI include such applications as Baseline Accounting and Reporting System, Mission Requirements Control System, Automated Scheduling and Planning, Automated Mission &amp; Payload Tracking System, Shuttle Drawing System, Program Compliance Assurance and Status System, Shuttle Integration Accounting Status System, Verification Information System, Work Authorizing Documentation System, Waivers/Exceptions, Operations and Maintenance Requirements and Specifications Change Processing, Document Configuration Management System, Technical Document Management System 2, Shuttle Payload Integration and Cargo Evaluation System, Critical Math Model Database, Launch Management System. The major expenses are either sustaining or migrating mainframe projects to a web-based, client-server environment. This also includes the cost allocations for the office automation services supporting the employees of this function.</p>
9. Did the Agency's Executive/Investment Committee approve this request?
Yes
9.a. If "yes," what was the date of this approval?
Jan 1, 2006
10. Did the Project Manager review this Exhibit?
Yes
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

12.b.1. If "yes," is an ESPC or UESC being used to help fund this investment?

12.b.2. If "yes," will this investment meet sustainable design principles?

12.b.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 the initiatives that apply:

<b>Human Capital</b>	Yes
<b>Budget Performance Integration</b>	Yes
<b>Financial Performance</b>	Yes
<b>Expanded E-Government</b>	
<b>Competitive Sourcing</b>	
<b>Faith Based and Community</b>	
<b>Real Property Asset Management</b>	
<b>Eliminating Improper Payments</b>	
<b>Privatization of Military Housing</b>	
<b>R and D Investment Criteria</b>	
<b>Housing and Urban Development Management and Performance</b>	
<b>Broadening Health Insurance Coverage through State Initiatives</b>	
<b>Right Sized Overseas Presence</b>	
<b>Coordination of VA and DoD Programs and Systems</b>	

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

The internal NASA web allows for electronic access to report data for the entire program, i.e. program performance indicators across the SSP. The system creates electronic access to SSP cost, schedule, and technical performance milestones data. The program has public website that was built to integrate program, project, and center sites to portray an integrated portrait of the program in detail to the general public.....Competitive Sourcing

14. Does this investment support a program assessed using OMB's Program Assessment Rating Tool (PART)?

Yes

14.a. If "yes," does this investment address a weakness found during the PART review?

No

14.b. If "yes," what is the name of the PART program assessed by OMB's Program Assessment Rating Tool?

Space Shuttle

14.c. If "yes," what PART rating did it receive?

Adequate

15. Is this investment for information technology (See section 53 for definition)?

Yes

**For information technology investments only:**

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

Level 3

17. What project management qualifications does the Project Manager have? (per CIO Council's 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 2006 agency high risk report (per OMB's "high risk" memo)?

No

19. Is this a financial management system?

No

19.a. If "yes," does this investment address a FFIA compliance area?

19.a.1. If "yes," which compliance area:

19.a.2. If "no," what does it address?

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 A-11 section 52.

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

Area	Percentage	
Hardware	15.80	
Software	10.30	
Services	73.90	
Other		
<b>Total</b>	100.00	★

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

<b>Name</b>	
<b>Phone Number</b>	
<b>Title</b>	
<b>Email</b>	

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

Yes

**SUMMARY OF FUNDING**

**SUMMARY OF SPENDING FOR PROJECT PHASES (In Millions)**

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

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

	PY	CY	BY
	2006	2007	2008
<b>Planning:</b>	0.000	0.000	0.000
<b>Acquisition:</b>	0.000	0.000	0.000
<b>Subtotal Planning &amp; Acquisition:</b>	0.000	0.000	0.000
<b>Operations &amp; Maintenance:</b>	11.741	12.579	11.971
<b>TOTAL</b>	11.741	12.579	11.971
<b>Government FTE Costs</b>	1.001	1.036	1.1
<b># of FTEs</b>	8.0	8.0	8.0
<b>Total, BR + FTE Cost</b>	12.742	13.615	13.041

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?

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

No Changes

Budget Comments \* Internal Use Only\*

**PERFORMANCE**

**Performance Information**

*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

	<b>Fiscal Year</b>	<b>Strategic Goal(s) Supported</b>	<b>Performance Measure</b>	<b>Actual/baseline (from Previous Year)</b>	<b>Planned Performance Metric (Target)</b>	<b>Performance Metric Results (Actual)</b>
<b>1</b>	2003	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Maintain 99% or better availability	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97% Maximum Error Rate (MER) = >97%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	99.90%
<b>2</b>	2004	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Maintain 99% or better availability	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	99.97%
<b>3</b>	2003	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Maintain SOE of 95% on-time delivery	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	98.57%
<b>4</b>	2004	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Maintain SOE of 95% on-time delivery	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	91.94
<b>5</b>	2003	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	0.75 DRs per month

<b>6</b>	2004	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	0.42 DRs per month
<b>7</b>	2005	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	99.97%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensure space access.	99.64%
<b>8</b>	2005	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	91.94%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	98.5%
<b>9</b>	2005	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	.42 DRs per month	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	.33 DRs per month
<b>10</b>	2005	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape usage projections for total SSPO.	85%	Maintain 85% or better	96.2% Average
<b>11</b>	2005	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction.	100%	Maintain 100%	100%
<b>12</b>	2006	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape usage projections for total SSPO.	85%	Maintain 85% or better	96.2% Average
<b>13</b>	2006	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction.	100%	Maintain 100%	100%

<b>14</b>	2006	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	99.640%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	FY06 Year-to-Date average of 99.986%
<b>15</b>	2006	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	98.5%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	97.368% (year to date for FY06)
<b>16</b>	2006	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	.33 DRs per month	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	.0 DRs per month (year to date for FY06)
<b>17</b>	2007	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	Improved from FY05 average of 99.640% to FY06 average of 99.986%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	TBD%
<b>18</b>	2007	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Performance of 98.5% (FY05) and 97.368% (year to date for FY06)	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	TBD%
<b>19</b>	2007	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Performance of 0.33 DRs per month (FY05) exceeded defined SOE with .0 DRs per month (year to date for FY06)	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	0.TBD DRs per month
<b>20</b>	2008	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	FY05 average of 99.TBD% to FY06 average of 99.TBD%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	TBD%
<b>21</b>	2008	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Performance of TBD%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	TBD%

<b>22</b>	2008	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Performance of 0.TBD DRs per month exceeded defined SOE	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	0.TBD DRs per month
<b>23</b>	2009	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	FY05 average of 99.TBD% to FY06 average of 99.TBD%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	TBD%
<b>24</b>	2009	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Performance of TBD%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	TBD%
<b>25</b>	2009	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Performance of 0.TBD DRs per month exceeded defined SOE	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	0.TBD DRs per month
<b>26</b>	2010	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Availability of systems: Standards of Excellence (SOE) = 99% Expectation = 97%	FY05 average of 99.TBD% to FY06 average of 99.TBD%	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access.	TBD%
<b>27</b>	2010	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Performance of TBD%	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems.	TBD%
<b>28</b>	2010	Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Performance of 0.TBD DRs per month exceeded defined SOE	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	0.TBD DRs per month

All new IT investments initiated for FY 2005 and beyond must use Table 2 and are required to use the 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](http://www.egov.gov).

Table 2

	Fiscal Year	Measurement Area	Measurement Category	Measurement Grouping	Measurement Indicator	Baseline	Planned Improvements to the Baseline	Actual Results
1	2005	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensure space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2005 to 2011	Year-to-date = 99.5%
2	2006	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensure space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2006 to 2011	99.986 (Year-to-Date)
3	2007	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensure space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2006 to 2011	TBD
4	2005	Customer Results	Timeliness and Responsiveness	Delivery Time	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Re-establish SOE of 95% on-time delivery each year from 2005 to 2011	Year-to-date = 97.92
5	2006	Customer Results	Timeliness and Responsiveness	Delivery Time	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Obtain 95% on-time delivery each year from 2006 to 2011	97.368% (Year-to-Date)
6	2007	Customer Results	Timeliness and Responsiveness	Delivery Time	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Re-establish SOE of 95% on-time delivery each year from 2005 to 2011	TBD
7	2005	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2005 to 2011	Year-to-date = 0.25 DRs per month

<b>8</b>	2006	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2006 to 2011	0 (Year-to-Date)
<b>9</b>	2007	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2006 to 2011	TBD
<b>10</b>	2005	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	Year-to-date =100%
<b>11</b>	2006	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	100%
<b>12</b>	2007	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	TBD
<b>13</b>	2005	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape usage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	Year-to-date =85%
<b>14</b>	2006	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape usage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	95.6% Year-to-Date Average

<b>15</b>	2007	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape usage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	TBD
<b>16</b>	2008	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2005 to 2011	TBD
<b>17</b>	2009	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2005 to 2011	TBD
<b>18</b>	2010	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2005 to 2011	TBD
<b>19</b>	2011	Technology	Reliability and Availability	Availability	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2005 to 2011	TBD
<b>20</b>	2008	Customer Results	Timeliness and Responsiveness	Delivery Time	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Re-establish SOE of 95% on-time delivery each year from 2006 to 2011	TBD
<b>21</b>	2009	Customer Results	Timeliness and Responsiveness	Delivery Time	Monthly percentage of unplanned or unscheduled outage supports the agency's goal of maintaining high system reliability and helps ensures space access	Availability of systems: Standards of Excellence (SOE) = 99% Maximum Error Rate (MER) = >97%	Maintain 99% or better availability each year from 2006 to 2011	TBD
<b>22</b>	2010	Customer Results	Timeliness and Responsiveness	Delivery Time	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Re-establish SOE of 95% on-time delivery each year from 2005 to 2011	TBD
<b>23</b>	2011	Customer Results	Timeliness and Responsiveness	Delivery Time	Annual percentage On-Time Delivery of PI Technical Information Systems IT products support both the Programs overall reliability and ensure affordability of the systems	On-time Delivery of PI Technical Information Systems IT Products - Standards of Excellence (SOE) = 95% Expectation = 80% Maximum Error Rate (MER) = >80%	Re-establish SOE of 95% on-time delivery each year from 2005 to 2011	TBD

<b>24</b>	2008	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2006 to 2011	TBD
<b>25</b>	2009	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2005 to 2011	TBD
<b>26</b>	2010	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2005 to 2011	TBD
<b>27</b>	2011	Processes and Activities	Quality	Errors	Monthly average of 4 or less DRs across released PI applications supports both the Programs overall reliability and ensures affordability of the systems.	Monthly average of 4 or less DRs across released PI applications Standards of Excellence (SOE) = 4 or less Discrepancy Reports (DRs) Expectation = 5 to 7 DRs Maximum Error Rate (MER) = 8 DRs	Maintain SOE of 4 or less discrepancies (DRs) against Program Integration (PI) released applications each year from 2005 to 2011	TBD
<b>28</b>	2008	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	TBD
<b>29</b>	2009	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	TBD
<b>30</b>	2010	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	TBD

<b>31</b>	2011	Customer Results	Customer Benefit	Customer Satisfaction	End User Satisfaction through the measurement of number of CRs implemented to user's satisfaction. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	100%	Obtain 100%	TBD
<b>32</b>	2008	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape useage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	TBD
<b>33</b>	2009	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape useage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	TBD
<b>34</b>	2010	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape useage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	TBD
<b>35</b>	2011	Technology	Information and Data	Data Reliability and Quality	Accuracy of computer resource projections through the accuracy of CPU hour, DASD, and tape useage projections for total SSPO. Goal 8: Ensure the provision of space access, and improve it by increasing safety, reliability, and affordability.	85%	Maintain 85%	TBD

**EA**

**Enterprise Architecture (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?

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.

JSC Space Shuttle Program Flight Integration

2.b. If "no," please explain why?

**Service Reference Model**

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 <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.*

	Agency Component Name	Agency Component Description	Service Domain	Service Type	Component	Reused Component Name	Reused UPI	Internal or External Reuse?	Funding %
1	Change Management	PI manages changes through formal processing of Support Requests (SR's), Software Change Requests (SCR's), and Software Work Requests (SWR's)	Business Management Services	Management of Processes	Change Management			No Reuse	25.00

<b>2</b>	Requirements Management	PI manages requirements through a Defined Software Development Lifecycle that includes defined documentation and approval processes.	Business Management Services	Management of Processes	Requirements Management			No Reuse	25.00
<b>3</b>	Quality Management	PI manages quality by using the standard USA Quality Management policies, procedures and processes.	Business Management Services	Management of Processes	Quality Management			No Reuse	10.00
<b>4</b>	Risk Management	PI uses the standard USA Risk management policies, procedures and processes.	Business Management Services	Management of Processes	Risk Management			No Reuse	5.00
<b>5</b>	Document Imaging and OCR	PI uses Hewlett Packard scanners and software in accordance with company standards	Digital Asset Services	Document Management	Document Imaging and OCR			No Reuse	4.00
<b>6</b>	Document Referencing	PI documents are stored in Documentum and made available through a web interface	Digital Asset Services	Document Management	Document Referencing			No Reuse	4.00
<b>7</b>	Document Revisions	PI controls document revision through use of a defined life cycle and revision control functionality with Documentum	Digital Asset Services	Document Management	Document Revisions			No Reuse	4.00
<b>8</b>	Library / Storage	PI documents are posted in Documentum and are made available through a web interface	Digital Asset Services	Document Management	Library / Storage			No Reuse	4.00
<b>9</b>	Document Review and Approval	PI manages document review and approval in accordance with published company and Program procedures	Digital Asset Services	Document Management	Document Review and Approval			No Reuse	4.00
<b>10</b>	Document Conversion	PI uses Adobe Acrobat to render documents in a viewable format	Digital Asset Services	Document Management	Document Conversion			No Reuse	4.00
<b>11</b>	Indexing	PI uses Documentum to provide document indexing	Digital Asset Services	Document Management	Indexing			No Reuse	4.00
<b>12</b>	Classification	PI classifies documents using predefined attributes in Documentum	Digital Asset Services	Document Management	Classification			No Reuse	4.00
<b>13</b>	Computers / Automation Management	PI computing assets are managed in CTS	Back Office Services	Asset / Materials Management	Computers / Automation Management			No Reuse	4.00
<b>14</b>	Legacy Integration	PI manages integration with legacy systems by coding interfaces as documented in ICD's/IDA's	Back Office Services	Development and Integration	Legacy Integration			No Reuse	4.00
<b>15</b>	Data Integration	PI manages integration with legacy systems by coding interfaces as documented in ICD's/IDA's	Back Office Services	Development and Integration	Data Integration			No Reuse	4.00
<b>16</b>	Software Development	PI manages software development through a defined Software Development Life Cycle	Back Office Services	Development and Integration	Software Development			No Reuse	4.00
<b>17</b>	Identification and Authentication	PI manages identification and authentication by using standard NT domain ID's, RACF ID's, or application specific ID's	Support Services	Security Management	Identification and Authentication			No Reuse	4.00

18	Access Control	PI manages access control by using standard NT domain ID's, RACF ID's, or application specific ID's	Support Services	Security Management	Access Control			No Reuse	4.00
19	User Management	PI uses an automated web-based Computer User Registration Form (CURF) process for user management	Customer Services	Customer Relationship Management	NEW			No Reuse	2.00
20	Privilege Management	PI manages role based security through the standard interfaces provided by COTS (i.e. Oracle, Documentum)	Customer Services	Customer Relationship Management	NEW			No Reuse	2.00
21	Resource Monitoring	PI performs resource monitoring through a monthly review of resource usage with the service provider	Support Services	Systems Management	System Resource Monitoring			No Reuse	2.00

### Technical Reference Model

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: 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.

SRM Component	Service Area	Service Category	Service Standard
Risk Management	Service Access and Delivery	Access Channels	Web Browser
Risk Management	Service Access and Delivery	Access Channels	Wireless / PDA
Risk Management	Service Access and Delivery	Access Channels	Collaboration / Communications
Risk Management	Service Access and Delivery	Delivery Channels	Internet
Risk Management	Service Access and Delivery	Delivery Channels	Extranet
Risk Management	Service Access and Delivery	Delivery Channels	Virtual Private Network (VPN)
Requirements Management	Service Access and Delivery	Service Requirements	Legislative / Compliance
Access Control	Service Access and Delivery	Service Requirements	Authentication / Single Sign-on
Computers / Automation Management	Service Access and Delivery	Service Requirements	Hosting
Computers / Automation Management	Service Access and Delivery	Service Transport	Supporting Network Services
Computers / Automation Management	Service Platform and Infrastructure	Support Platforms	Platform Independent
Computers / Automation Management	Service Platform and Infrastructure	Support Platforms	Platform Dependent
Computers / Automation Management	Service Platform and Infrastructure	Delivery Servers	Application Servers

<b>SRM Component</b>	<b>Service Area</b>	<b>Service Category</b>	<b>Service Standard</b>
Software Development	Service Platform and Infrastructure	Software Engineering	Integrated Development Environment
Change Management	Service Platform and Infrastructure	Software Engineering	Software Configuration Management
Computers / Automation Management	Service Platform and Infrastructure	Software Engineering	Test Management
Computers / Automation Management	Service Platform and Infrastructure	Software Engineering	Modeling
Computers / Automation Management	Service Platform and Infrastructure	Database / Storage	Database
Library / Storage	Service Platform and Infrastructure	Database / Storage	Storage
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Servers / Computers
Computers / Automation Management	Service Platform and Infrastructure	Hardware / Infrastructure	Peripherals
Access Control	Component Framework	Security	Certificates / Digital Signatures
Indexing	Component Framework	Presentation / Interface	Content Rendering
Computers / Automation Management	Component Framework	Business Logic	Platform Dependent
Data Integration	Component Framework	Data Interchange	Data Exchange
Computers / Automation Management	Service Interface and Integration	Integration	Middleware
Data Integration	Service Interface and Integration	Interoperability	Data Format / Classification
Data Integration	Service Interface and Integration	Interoperability	Data Types / Validation
Data Integration	Service Interface and Integration	Interoperability	Data Transformation

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

No

5.a. If "yes," please describe.

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

No

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

6.a.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).

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<b>RISK</b>
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<b>Risk Management</b>
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<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>
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<i>Answer the following questions to describe how you are managing investment risks.</i>
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<i>1. Does the investment have a Risk Management Plan?</i>
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Yes
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<i>1.a. If "yes," what is the date of the plan?</i>
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Sep 8, 2003
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<i>1.b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?</i>
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No
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<i>1.c. If "yes," describe any significant changes:</i>
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<i>2. If there is currently no plan, will a plan be developed?</i>
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<i>2.a. If "yes," what is the planned completion date?</i>
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<i>2.b. If "no," what is the strategy for managing the risks?</i>
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<i>3. Briefly describe how investment risks are reflected in the life cycle cost estimate and investment schedule: (O&amp;M investments do NOT need to answer.)</i>
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**COST & SCHEDULE**

**Cost and Schedule Performance**

1. Was operational analysis conducted?

Yes

1.a. If "yes," provide the date the analysis was completed.

Oct 1, 2006

1.b. If "yes," what were the results?

An Operational Analysis is not performed at discrete milestones within the lifecycle of the Space Shuttle Program and its operations support contracts SFOC/SPOC. Continuous operational assessments are performed on capital assets to determine their performance and effectiveness in meeting critical mission operations objectives. A Performance Measurement System is used to track and monitor monthly key metrics to evaluate the effectiveness, efficiency, productivity, availability, reliability, security, etc. of capital assets. Operations and maintenance costs associated with these capital assets are reviewed monthly in conjunction with the metrics to identify any early warning indicators that may impact lifecycle costs and performance goals. These data are used to reprioritize operations and maintenance costs to underperforming assets and/or the requests for new funding in annual Program Operating Plan inputs.

1.c. If "no," please explain why it was not conducted and if there are any plans to conduct operational analysis in the future.

**Actual Performance against the Current Baseline**

2. Complete the following table to compare actual cost performance against the planned cost performance baseline. Milestones reported may include specific individual scheduled preventative and predictable corrective maintenance activities, or may be the total of planned annual operation and maintenance efforts).

2.a. What costs are included in the reported Cost/Schedule Performance information?

Contractor Only

	Description of Milestone	Planned End Date	Actual End Date	Planned Total Cost (\$mil)	Actual Total Cost (\$mil)	Schedule Variance (# of days)	Cost Variance (\$mil)
1	FY 06 Maintenance Cost	Sep 30, 2006	Sep 30, 2006	11.740	11.740	0	0.000
2	FY 07 Maintenance Cost	Sep 30, 2007		12.580			
3	FY 08 Maintenance Cost	Sep 30, 2008		11.970			
4							
5							

			DME	Steady State	Total
<b>Completion date: Current Baseline:</b>	Sep 30, 2011	<b>Total cost: Current Baseline:</b>		87.904	87.904
<b>Estimated completion date:</b>	Sep 30, 2011	<b>Estimate at completion:</b>			