OVERVIEW 1. Date of Submission: 2007-09-10 429 2. Agency: 3. Bureau: 00 4. Name of this Capital Material Licensing Program - Web-Based Licensing (WBL) Asset: 5. Unique Project Identifier: 429-00-01-01-01-1001-00 6. What kind of investment will this be in FY2009? **Full-Acquisition** 7. What was the first budget year this investment was submitted to OMB? FY2001 or earlier 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. This investment manages the licensing and inspection of nuclear materials. The WBL will track the license application processes (new licenses, renewals, amendments, and terminations) and provide computerized records of each specific license. It will handle specific licenses issued for the possession and use of byproduct material, source, and special nuclear material. WBL will maintain a multitude of important characteristics: basic information (license number, program code, approved usage type, etc), possession limits, authorized users, locations of use, and fee data. It will also store the most recent inspection information on the licenses. The Web-Based Licensing (WBL) system will replace Licensing Tracking System (LTS, UPI:429-00-01-04-01-1000-00-301-093) for its licensing tracking capability. WBL will also replace the legacy Inspection Planning System (IPS) for its inspection planning and tracking capability and integrate inspection records with the license information. More importantly, WBL will support e-Gov by providing online NRC license information verification capability to the authorized users. The licensees will ultimately be able to submit and track the progress of license actions through a web interface. In addition to the licensee service functions, the WBL also provides the ability to satisfy the emerging needs in the modern information technology environment. Specifically, these needs include the accessibility for the disabled (Section 508 of the Rehabilitation Act); security measures to protect the information against malevolent act; robust and user friendly interfaces and flexible query capability; and disaster recovery capability. 9. Did the Agency's Executive/Investment Committee approve this request? 9.a. If "ves." what was the date of this approval? 2007-08-29 10. Did the Project Manager review this Exhibit? 11. Project Manager Name: Cheng (WBL), Carmen Project Manager Phone: 301-415-7962 Project Manager Email: CTC1@nrc.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.

PART ONE

yes

yes

ves

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 supp	nort one of the PMA initiatives?							
yes								
If yes, select the initiatives that apply:								
Expanded E-Government								
Financial Performance								
13.a. Briefly and specifically describe shared service provider or the managi	for each selected how this asset directly supports the identified initiative(s)? (e.g. If E-Gov is selected, is it an approved ing partner?)							
WBL will provide a Web portal system for tracking licensing activities and license fees. WBL, as replacement to Licensing Tracking System, will provide more accurate fees records, and will use modern technologies and improved processes to improve efficiency. The WBL will provide online verification capability of NRC license information in the first release, and establish the platform for online license action submission by licenseess and applicants in the subsequent releases.								
14. Does this investment support a pro	ogram assessed using the Program Assessment Rating Tool (PART)?							
no								
15. Is this investment for information to	echnology?							
yes								
16. What is the level of the IT Project	(per CIO Council's PM Guidance)?							
Level 1								
17. What project management qualific	ations does the Project Manager have? (per CIO Council's PM Guidance)							
(1) Project manager has been val	lidated as qualified for this investment							
18. Is this investment identified as high	h risk on the Q4 - FY 2007 agency high risk report (per OMB memorandum M-05-23)?							
no								
19. Is this a financial management sys	stem?							
no								
20. What is the percentage breakout f	or the total FY2008 funding request for the following? (This should total 100%)							
Hardware	19							
Software	4							
Services	60							
Other	16							
21. If this project produces information Memorandum 05-04 and included in y	ו dissemination products for the public, are these products published to the Internet in conformance with OMB our agency inventory, schedules and priorities?							
yes								
22. Contact information of individual re	esponsible for privacy related questions.							
Name								
Sandra Northern								
Phone Number								
301-415-6879								
Title								
Privacy Officer								
Email								
SSN@nrc.gov	SSN@nrc.gov							
23. Are the records produced by this in	nvestment appropriately scheduled with the National Archives and Records Administration's approval?							
no								
24. Does this investment directly supp	ort 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. 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-1 & Earlier		СҮ	ВҮ	BY+1	BY+2	BY+3	BY+4 & Beyond
	-2006	2007	2008	2009	2010	2011	2012	2013+
Planning Budgetary Resources	0.000	0.145	0.000	0.000	0.000	0.000	0.000	0.000
Acquisition Budgetary Resources	0.000	0.000	0.319	1.100	0.000	0.000	0.000	0.000
Maintenance Budgetary Resources	0.000	0.000	0.000	0.000	0.646	0.757	0.763	1.629
Government FTE Cost	0.000	0.089	0.135	0.238	0.151	0.158	0.166	0.355
# of FTEs	0	1	1	1	1	1	1	2

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

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

This report contains only WBL. The LTS data previously included in this investment has been extracted into a separate OMB E53 for LTS. As a result, the Summary of Spends cost has been adjusted to show only WBL data. The above of Summary of Spends shows the NRC approved budgetary resouces as identified in the NRC Form 9. Carryover funds that may be used for this investment is not included in the NRC Form 9. Due to these changes, NRC's structuring the IT porfolio, emerging IT Security requirements, and Section 508 compliance, the milestone plan associated with the WBL investment was rebaselined and approved on 8/29/2007. The rebasedlined milestone plan is presented in this BY09 Exhibit 300 submission. This new milestone plan provides greater detail, more accuracy, and insight into the project, therefore enabling tighter project management control.

ACQ STRATEGY

1. Complete the table for all (including all non-Federal) contracts and/or task orders currently in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

	Number	Туре	Awarded?	Award date (planned or actual)	Start Date	End Date	Total Value (\$M)
1	To-be-awarded - 508 Compliance	FFP: Firm Fixed Price	no	2007-12-31	2008-01- 15	2008-10- 02	0.563
2	To-be-awarded - Development	T&M: Time & Materials	no	2007-12-31	2008-09- 22	2009-11- 20	1.311
3	To-be-awarded - Integration	T&M: Time & Materials	no	2007-12-31	2008-01- 15	2009-11- 20	2.138
4	To-be-awarded - O&M	T&M: Time & Materials	no	2007-12-31	2009-11- 20	2010-09- 30	0.516

	Number	Interagency Acquisition?	Performance based?	Competitively awarded?	Alternative Financing Option?	EVM in contract?	Include sec & priv clauses?
1	To-be-awarded - 508 Compliance	no	yes	yes	NA	yes	yes
2	To-be-awarded - Development	no	yes	yes	NA	yes	yes
3	To-be-awarded - Integration	no	yes	yes	NA	yes	yes
4	To-be-awarded - O&M	no	yes	yes	NA	yes	yes

	Number	CO Name	CO Contact	CO Certification Level	If N/A, CO Competent?
1	To-be-awarded - 508 Compliance	Eleni Jernell	301-415-6201 EXJ1@nrc.gov	3	
2	To-be-awarded - Development	Eleni Jernell	301-415-6201 EXJ1@nrc.gov	3	
3	To-be-awarded - Integration	Eleni Jernell	301-415-6201 EXJ1@nrc.gov	3	
4	To-be-awarded - O&M	Eleni Jernell	301-415-6201 EXJ1@nrc.gov	3	

3. Do the contracts ensure Section 508 compliance?

yes

3.a. Explain why.

The NRC requires the contractor to prove 508 compliance by providing a third party VPAT (Voluntary Product Accessibility Template) report with all releases delivered - initial release, and every release after the system enters operations phase. In addition, the NRC Office of Information Services staff will inspect the software after the satisfactory review of the VPAT reports. The system will be accepted as 508 compiant only after it passes the NRC inspection.

4. Is there an acquisition plan which has been approved in accordance with agency requirements?

yes

4.a. If yes, what is the date?

2007-06-05

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
1	2010	Strategic Goal #1	Mission and Business Results	Program Monitoring	The percentage of new licensing actions completed within 90 calendar days of the receipt of a request. Licensing actions completed include licenses issued, voided and denied.	90% completion	90% completion	TBD
2	2010	Strategic Goal #4	Customer Results	Response Time	Average number of calendar days a response is issued from a FOIA request.	30 days	28 days	TBD
3	2010	Strategic Goal #4	Processes and Activities	Productivity	Number of hours needed for an inspector to prepare for a materials related inspection.	20 hours	18 hours	TBD
4	2010	Strategic Goal #5	Technology	Overall Costs	Average annual cost for all new licenses and amendments for material licensing actions.	\$2,692,308	\$2,519,344 (Saving of \$443K, or 15%)	TBD
5	2011	Strategic Goal #1	Mission and Business Results	Program Monitoring	ram The percentage of new licensing actions completed within 90 calendar days of the receipt of a request. Licensing actions completed include licenses issued, voided and denied.		96% completion	TBD
6	2011	Strategic Goal #4	Customer Results	ts Response Time Average number of calendar days a response is issued from a FOIA request.		30 days	28 days	TBD
7	2011	Strategic Goal #4	Processes and Activities	Productivity	Number of hours needed for an inspector to prepare for a materials related inspection.	20 hours	18 hours	TBD
8	2011	Strategic Goal #5	Technology	Overall Costs	Average annual cost for all new licenses and amendments for material licensing	\$3,051,178	\$2,594,925 (Saving of \$456K, or 15%)	TBD

					actions.			
9	2012	Strategic Mission and Goal #1 Business Resul		n and Program The person Results Monitoring new lice complete calend receipt Licensi complete license and de license and de license complete l		90% completion	96% completion	TBD
10	2012	Strategic Goal #4	Customer Results	Response Time	Average number of calendar days a response is issued from a FOIA request.	30 days	28 days	TBD
11	2012	Strategic Goal #4	Strategic Goal #4 Processes and Activities Productivity Number of hours needed for an inspector to prepare for a materials related inspection. Strategic Technology Overall Costs Average enpugl costs		Number of hours needed for an inspector to prepare for a materials related inspection.	20 hours	18 hours	TBD
12	2012	Strategic Goal #5	Technology	Overall Costs	Average annual cost for all new licenses and amendments for material licensing actions.	\$3,142,713	\$2,672,772 (Saving of \$470K, or 15%)	TBD
13	2013	Strategic Goal #1	Mission and Business Results	Program Monitoring	The percentage of new licensing actions completed within 90 calendar days of the receipt of a request. Licensing actions completed include licenses issued, voided and denied.	90% completion	96% completion	TBD
14	2013	Strategic Goal #4	Customer Results	Response Time	Average number of calendar days a response is issued from a FOIA request.	30 days	28 days	TBD
15	2013	Strategic Goal #4	Processes and Activities	Productivity	Number of hours needed for an inspector to prepare for a materials related inspection.	20 hours	18 hours	TBD
16	2013	Strategic Goal #5	Technology	Overall Costs	Average annual cost for all new licenses and amendments for material licensing actions.	\$3,236,944	\$2,752,955 (Saving of 484K, or 15%)	TBD
17	2014	Strategic Goal #1	Mission and Business Results	Program Monitoring	Number of hours needed for an inspector to prepare for a materials related inspection.	90% completion	96% completion	TBD
18	2014	Strategic Goal #4	Customer Results	Response Time	Average number of calendar days a response is issued from a FOIA request.	30 days	28 days	TBD
19	2014	Strategic Goal #4	Processes and Activities	Productivity	Number of hours needed for an inspector to prepare for a materials related inspection.	20 hours	18 hours	TBD

20	2014	Strategic Goal #5	Technology	Overall Costs	Average annual cost for all new licenses and amendments for material licensing actions.	\$3,334,052	\$2,833,944 (Saving of 500K, or 15%)	TBD

SECURITY & PRIVACY

In order to successfully address this area of the business case, each question below must be answered at the system/applicatiÂon 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.

For all investments, please respond to the questions below and verify the system owner took the following actions:

1. Identified the IT security costs for the system(s) and have integrated those costs into the overall costs of the investment:

yes

1.a. If yes, provide the Percentage IT Security for the budget year.

8.97

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 and Undergoing Enhancement(s), Development, and/or Moderization

System Name	Agency or Contractor?	Planned Operational Date	Date of Planned C&A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)
Web-Based Licensing - System	Contractor and Government	2009-11-19	2009-10-22

5. Have any weaknesses related to any of the systems part of or supporting this investment been identified by the agency or IG?

no

6. Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses?

no

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

Web Based Licensing (WBL) is in the planning stage and will enter full acquisition in FY08. The NRC has incorporated all appropriate security requirements as required by law and policy in particular, FISMA compliance requirements and National Institute of Standards and Technology information technology guidance references, in the development contract Statement of Work and the system requirements documentation. The Web Based Licensing business case recommends that the system be hosted at a commercial Application Services Provider (ASP). The ASP will be required to conform to security requirements as required by law and policy. The NRC will conduct a site certification and will negotiate a Service Level Agreement (SLA) with the ASP which will specifically spell out the expected levels of service including security services, operational and maintenance responsibilities. As required by FISMA, the system will have a security assessment conducted annually.

8. System Privacy Data

System Name	New System?	Is there a PIA?	PIA Internet Link or Explanation	Is SORN required?	SORN Internet Link or Explanation
Web-Based Licensing - System	yes	yes	http://www.nrc.gov/about-nrc/plans/privacy-impcat- asess.html The results of the PIA determined that there will be no PII containted within this system.	no	Since this will not contain PII, this will not be a privacy act system of

record.	Ι.			
				record.

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

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.

Web Based Licensing

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

yes

3.a. If yes, provide the name of the segment architecture as provided in the agency's most recent annual EA Assessment.

Licensing

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.

	Agency Component Name	Agency Component Description	Service Type	Component	Reused Component Name	Reused UPI	Internal or External Reuse?	Funding %
1	Process Tracking	Maintains case information for each license and their licensing and inspection history.	Tracking and Workflow	Process Tracking			No Reuse	30
2	Customer / Account Management	Provides retention and delivery of licensing information to subscribers	Customer Relationship Management	Customer / Account Management			No Reuse	10
3	Information Retrieval	Allows access to data and information for use by an user	Knowledge Management	Information Retrieval			No Reuse	10
4	Informatin Sharing	Stored in ADAMS, the NRC electronic records system to associate licensing actions to correspondence	Knowledge Management	Information Sharing	Document Imaging and OCR	001-02- 01-02-01- 1010-00	Internal	4
5	Knowledge Capture	Collects licensing information	Knowledge Management	Knowledge Capture	Billing and Accounting	001-02- 01-01-01- 2025-00	No Reuse	5
6	Knowledge Distribution	Provides information for internal and external (FOIA) reporting	Knowledge Management	Knowledge Distribution and Delivery			No Reuse	2

		requests					
7	Ad Hoc	Allows search and display of licensing information	Reporting	Ad Hoc		No Reuse	8
8	Standardized / Canned	Allows search of standard reports and addresses various workflow, productivity and other management questions related to licensing information	Reporting	Standardized / Canned		No Reuse	10
9	Data Integration	Supports the organization of data into a single source	Development and Integration	Data Integration		No Reuse	3
10	Software Development	Supports the creation of processes	Development and Integration	Software Development		No Reuse	10
11	Access Control	Provides roles-based access controls	Security Management	Access Control		No Reuse	8

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.

	SRM Component	Service Area	Service Category	Service Standard	Service Specification (i.e., vendor and product name)
1	Customer / Account Management	Service Platform and Infrastructure	Delivery Servers	Application Servers	Versa LicenseEase, Versa eGateway, Orion Application Server, Oracle Application Server (OAS) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950
2	Process Tracking	Service Platform and Infrastructure	Delivery Servers	Application Servers	Versa LicenseEase, Versa eGateway, Orion Application Server, Oracle Application Server (OAS) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950
3	Information Retrieval	Service Platform and Infrastructure	Delivery Servers	Application Servers	Versa LicenseEase, Versa eGateway, Orion Application Server, Oracle Application Server (OAS) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950
4	Information Sharing	Service Platform and Infrastructure	Delivery Servers	Application Servers	Versa LicenseEase, Versa eGateway, Orion Application Server, Oracle Application Server (OAS) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950
5	Knowledge Capture	Service Platform and Infrastructure	Database / Storage	Database	Oracle Real Application Cluster (RAC) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950, Dell PowerVault 220S
6	Knowledge Distribution and Delivery	Service Platform and Infrastructure	Delivery Servers	Web Servers	Versa LicenseEase, Versa eGateway, Oracle HTTP Server (OHS) 10g, Dell PowerEdge 1950
7	Ad Hoc	Component Framework	Presentation / Interface	Dynamic Server-Side Display	Business Objects Crystal Reports, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950
8	Standardized / Canned	Service Platform and Infrastructure	Delivery Servers	Application Servers	Business Objects Crystal Reports, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge

9	Data Integration	Service Platform and Infrastructure	Database / Storage	Database	Oracle Real Application Cluster (RAC) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950, Dell PowerVault 220S		
10	Software Development	Component Framework	Component Business Logic Framework		Server Side J2EE		
11	Access Control	Service Platform and Infrastructure	Support Platforms	Platform Dependent	Versa LicenseEase, Versa eGateway, Orion Application Server, Oracle Application Server (OAS) 10g, RedHat Linux Enterprise v4.0 Operating System, Dell PowerEdge 1950		

PART TWO

ALT ANALYSIS

In selecting the best capital asset, you should identify and consider at least three viable alternatives, in addition to the current baseline, i.e., the status quo. Use OMB Circular A-94 for all investments, and the Clinger Cohen Act of 1996 for IT investments, to determine the criteria you should use in your Benefit/Cost Analysis.

An Alternatives Analysis for E-Gov and LOB initiatives should also be obtained. At least three viable alternatives, in addition to the current baseline (i.e., the 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

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

2007-06-05

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

Alternative Name	Description	Risk Adjusted Lifecycle Costs estimate	Risk Adjusted Lifecycle Benefits estimate
Build a Commercial-Off-The- Shelf (COTS) based system and operate it using a commercial Application Service Provider (ASP)	The NRC would develop the Web-Based Licensing system using a proven Commercial Off-the-Shelf (COTS) licensing package as a base. NRC conducted market research and determined that there are at least two commercial products that have been used as the base for developing operational licensing systems for multiple state agencies. The system would be operated by a commercial ASP whose core competency is Web-based secure systems.	5.820	14.643
Build a custom system and operate it using a commercial Application Service Provider (ASP)	In this alternative, the NRC also would follow the strategy used for GLTS and build a custom system using Sybase and PowerBuilder as core components. However, in this case the system would be operated by a commercial application service provider (ASP) whose core competency is Web-based secure systems. This is a viable option that is included as an alternative in the detailed analysis.	18.957	12.322
Build a Custom system and operate it in-house	In this option, the NRC would follow the strategy used for an exsiting system GLTS and build a custom system using Sybase and PowerBuilder as core components and operate the resultant system in house. This is a viable option that is included as an alternative in the detailed analysis.	19.955	12.322
Status Quo	No Change. Continue to use the legacy system Licensing Tracking System (LTS) which is running in a mainframe operating environment and outdated proprietary database. This is not a viable alternative due to the emerging needs for modern technology.	20.753	-2.897

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

Alternative 1 This approach best meets the business needs of NRC and provides the lowest parallel operations and recurring costs, greatest benefits, and lowest risks of any alternative. In addition, the investment cost for this approach is lower than the investment of the other two alternatives. Alternative 3 has no areas of high risk. Furthermore, the implementation schedule for Module 1 in this alternative is six months shorter than those in other alternatives. The strategy of using a COTS products and operating it by an Application Service Provider is consistent with OMB direction. In addition, NRC believes that this strategy is well proven based on the results achieved by over 50% of the States in this country who operate licensing systems built around COTS products. Most of these States use their COTS-based systems to process numerous license types for a licensee population that far exceeds the number of U.S. materials licensees. A key element of this alternative is that it uses a COTS-based solution rather than a custom development effort. The NRC derived baseline cost estimates for setup and customization of COTS using a top-down approach. The estimate used was intentionally set at the high end of the comparative range in order to provide a conservative figure and establish a risk-adjusted estimate consistent with OMB guidance. A separate bottom-up approach was used to crosscheck these estimates. In this approach, a high level review of the system requirements against the capabilities of the two representative COTS packages was conducted. Major areas in which setup and customization efforts are likely to be needed were identified and categorized by level of effort. Contractor cost figures were associated with each level of effort. The resultant costs for each area were then summed to establish a total cost estimate. The totals obtained using the two approaches varied by less than 5%. The NRC conducted a sensitivity analysis to determine the effect of an even greater risk-adjusted estimate. In this analysis, the estimate for setup and customization of COTS was increased to 20% above the very high end of the comparative range to determine if the COTS solution would have lower investment costs than the customized solutions even at this level. Based on this expanded risk-adjusted analysis, the NRC determined that custom development costs would still be between 9% and 12% higher than the total investment cost for the

recommended alternative.

4. What specific qualitative benefits will be realized?

* More timely review and delivery process of licenses to licensees accomplished by improved work-flow including validation of entered data, online links to regulations, and online status of data and the licensing process. * Improved productivity through the reduction of staff processing time for licensing applications and related activities, freeing technical staff for non-administrative work. * Improved management information for business process improvement and resource allocation * Easier-to-maintain system based on technology suited to act as the platform for eventual integration of other related NMSS materials and waste management systems. The COTS system utilizes a significant level of standard licensing functionality that can be easily tailored to meet specific requirements of other FSME credential tracking applications. * Use of a COTS product, OMB's preferred software approach, that has been developed based upon the vendor's research into the best licensing practices currently employed by government and private organizations. As such, the COTS product is a solid technical solution that has been proven viable in similar environments. * Provides the NRC the ability to control the underlying software and have core software modified with the potential of keeping the NRC abreast of the latest and best licensing practices in current and future releases. * Utilizes a platform that can be easily leveraged for future Web access.

5. Will the selected alternative replace a legacy system in-part or inwhole?

yes

5.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

5.b. If yes, please provide the following information:

	Name of Legacy System	UPI if available	Date of the System Retirement
1	Licensing Tracking System	429-00-01-01-02-1001-00	2009-12-20
2	Inspection Planning System		2010-01-30

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.

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

1. Does the investment have a Risk Management Plan?

yes

1.a. If yes, what is the date of the plan?

2007-07-02

1.b. Has the Risk Management Plan been significantly changed since last year's submission to OMB?

yes

1.c. If yes, describe any significant changes:

In last year's report, NRC reported the agency's efforts to re-baseline the project to satisfy the emerging requirements for information security and customer service (including Section 508 compliance and security certification and accreditation) and remediate contract issues. One of the major risks identified was that the prime contractor who had limited knowledge of the chosen Commercial-Off-The-Shelf (COTS) software product presented a risk in their ability to clearly communicate to the COTS vendor, the subcontractor, all of the NRC's needs and concerns. Since last year, the original contract has expired and the project team has developed a new acquisition strategy which consists of two separate contracts. The first contract is designed to have the COTS vendor complete the Section 508 compliance programming, work to meet remaining functional requirements development and manage configuration of their COTS product which the system is based on. The second contract provides NRC the integration, deployment, operational services, and assistance for the security tasks. The new strategy prompted the need to re-evaluate and update the Risk Management Plan because the new strategy increases the number of roles in the project team which therefore requires more complex integrated project planning and risk management plan. The strategy allows better control by the NRC project manager of the quality of the products and deliverables. This also greatly increases the importance of communication as project coordination and the degree of dependencies among the parties also increases. During the past fiscal year, FISMA, NIST and the agency's information system security requirements have solidified and the processes within the NRC have became more sophisticated. The project team must now pay special attention to any schedule and cost risks that may evolve specific to security requirements and security tasks - this includes the identification of those risks and risk owners, as well as developing the corresponding mitigation strategies.

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

For the contractor effort that will result in the COTS application being made compliant with Section 508, the project documentation identifies requirements and built-in costs for the contractor to prove the system's compliance by obtaining a third party Section 508 VPAT (Voluntary Product Accessibility Template) report. A separate VPAT report is identified as mandatory with every release of the software that is delivered to the NRC - including the initial release, and every release after the project enters the operations and maintenance phase. The NRC is not only interested in the system being Section 508 compliant when initially delivered and deployed but through its life. To mitigate the risk of communication barriers and to improve cooperation between the COTS vendor and the integration contractor, the NRC has included requirements in the SOWs and cost estimates that will: 1) have the two contractor organizations provide support access to each other as necessary to accomplish deployment; 2) require creation of an integrated project schedule that all the organizations (contractors and the NRC project team) will agree on; 3) revisit identified risks and other project issues on a weekly basis; 4) include an IV&V (Independent Verification and Validation) contractor in the integrated project team; 5) assign the integration contractor to conduct system tests; 6) assign the IV&V contractor to assist NRC with the final acceptance tests; and 7) use an iterative approach to produce deliverables in multiple increments over the span of the project cycle. With regard to Information Security, the SOWs and cost estimates include the costs of the initial C&A (Certification and Accreditation) and meeting the FISMA requirements for the Web-Based Licensing system. Also included are the costs of annual C&A and FISMA updates and requirements and the tri-annual ATO (Authority-To-Operate) re-certification for WBL system once it is in the operation and maintenance phase. The costs included in the estimates followed the NRC OIS (Office of Information Services) published guidance.

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} ± 10%?

no

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

yes

3.a. If yes, when was it approved by the agency head?

2007-08-29

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.

	Description of Milestone	Initial End Date	Initial Total Cost (\$mil)	Planned End Date	Actual End Date	Planned Total Cost (\$mil)	Actual Total Cost (\$mil)	Schedule Variance (# of days)	Cost Variance (\$mil)	Percent Complete
1	Planning: Acquisition Plans	2007- 12-29	0.234	2007-12- 29		0.234				0
2	Acquisition: 508 Compliance Report Delivered	2008- 08-22	0.073	2008-08- 22		0.073				0
3	Acquisition: 508 Compliance Acceptance	2008- 10-02	0.044	2008-10- 02		0.044				0
4	Acquisition: Security Requirements (C&A)	2008- 08-28	0.088	2008-08- 28		0.088				0
5	Acquisition: Security Testing and Evaluation	2009- 08-16	0.073	2009-08- 13		0.073				0
6	Acquisition: Initial Build (development)	2009- 07-09	0.366	2009-07- 09		0.366				0
7	Acquisition: Training	2009- 09-10	0.073	2009-09- 10		0.073				0
8	Acquisition: Data Conversion	2009- 06-02	0.146	2009-06- 02		0.146				0
9	Acquisition: System Configuration	2009- 05-18	0.102	2009-05- 18		0.102				0
10	Acquisition: System Testing	2009- 07-16	0.219	2009-07- 16		0.219				0
11	Acquisition: System Integration	2009- 07-10	0.146	2009-07- 10		0.146				0
12	Acquisition: System Deployment	2009- 10-31	0.102	2009-10- 31		0.102				0

13	Acquisition: Security FISMA Requirements	2010- 02-24	0.029	2010-02- 24	0.029		0
14	Acquisition: Production environment	2009- 06-29	0.330	2009-06- 29	0.330		0
15	Operations & Maintenance - Year 1	2010- 09-30	0.797	2010-09- 30	0.797		0
16	Operations & Maintenance - Year 2	2011- 09-30	0.915	2011-09- 30	0.915		0
17	Operations & Maintenance - Year 3	2102- 09-30	0.929	2012-09- 30	0.929		0
18	Operations & Maintenance - Year 4	2013- 09-30	1.153	2013-09- 30	1.153		0
19	Operations & Maintenance - Year 5	2014- 09-30	0.831	2014-09- 30	0.831		0

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