

Action Plan for a Redesign of the Public Web Site

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Attachment: Timeline of Milestones

Executive Summary

The NRC proposes to redesign the agency's Public Web Site to improve the experience of members of the general public who frequent the site each day. This multi-year effort will draw upon existing staff in the Office of Information Services and the various program offices that contribute to the site.

The project will be led by a senior project manager and will include expert contract assistance to gather and analyze requirements and propose several alternative approaches to meet those challenges.

Each alternative will be analyzed for usability by stakeholders in a controlled test environment. The selected alternative will be fully implemented at the Public Web Site by the close of the project. As discussed in the Scope, below, the alternative selected during phase 1 will determine the scope cost of the second phase.

The senior project manager is the only new staff position needed for this project that is not in the NRC's current budget. The redesign is expected to last up to 2 years at a cost of approximately \$1.5 to 2 million.

Purpose

This action plan describes the proposed approach to redesign the agency's Public Web Site to improve the experience of members of the general public who frequent the site each day. This effort will mark the beginning of a new cycle of continuous, incremental improvements to ensure the site remains fresh and appealing to all of the NRC's external stakeholders. The NRC seeks to make the Public Web Site the first place members of the public go to find information on any topic within the agency's areas of regulatory responsibility.

Scope

The NRC seeks to improve the navigation, appearance, content, and accessibility of the site to meet the changing needs of the public audience. To accomplish this objective, the redesign project will encompass two phases, the first to gather requirements and select from several proposed alternatives to meet those requirements, and the second to implement the selected alternative. The alternative selected during phase 1 will determine the scope of the second phase.

This activity will provide a separate contract vehicle for

1. acquiring expert assistance in gathering and analyzing user expectations and external requirements,
2. preparing design alternatives to meet those requirements, and
3. performing usability tests at a contract facility.

The contract(s) will provide advanced skills to supplement those already available from NRC staff and existing contractors.

Sources of requirements include, but are not limited to, the following

1. NRC Public Site statistics and existing user data
2. Select stakeholders and site users from a wide variety of demographic sources
3. Expert analysis by usability professionals
4. NRC Web Content Services Team, Communications Council, Office of Public Affairs
5. Industry and governmental best practices, such as those recommended in the 2007 report provided on behalf of the NRC, "Gauging Public Perception, External Focus Group Findings, Analysis and Communications Recommendations for the U.S. Nuclear Regulatory Commission," by Information Experts.

Assumptions

1. The NRC will not duplicate content available at other Web sites sponsored by the Federal government.¹
2. Before beginning phase 1 of this project, OIS will have hired a senior project manager to oversee the redesign.
3. Before beginning Phase 2 of this project, OIS will have accomplished the following
 - a. successfully implemented the Web Content Management Services (CMS) project² to host and manage both the existing Public Site and any proposed alternative designs and content,
 - b. trained participating staff from the program offices in the use of CMS,
 - c. acquired and trained a Web Content Architect to oversee changes to the site structure and format proposed through the redesign, and
 - d. obtained the Chairman's approval to proceed with the procurement of contract assistance for the redesign.

¹ For example, EPA's site on Radiation Protection (<http://www.epa.gov/rpdweb00/>) and FEMA's site on Disaster Preparedness (<http://www.fema.gov/areyouready/>)

² Web Content Management Services (CMS) is a separate contract to provide an outsourced system for publishing Web pages to the Public Web Site. Scheduled for completion in FY2008, this project will enable the NRC staff to create, review, and publish Web pages in a Web browser from anywhere at anytime. While it will not substitute for expert design assistance and content review, it is expected to simplify the process for staging, reviewing, and publishing Web pages.

4. Needs uncovered during the requirements gathering phase that necessitate additional information technology or software development such as Web 2.0 will be collected, prioritized, and held for future follow-on projects, but will not result in additional tasks for this redesign.
5. Each NRC program office is expected to contribute the resources identified herein.

Milestones

See the attached Timeline of Milestones for a graphical presentation of the milestones.

There are three sets of milestones:

1. Precursors--activities outside the redesign activity that must be accomplished before the Phase 2 Tasks of the Redesign can begin. The precursors provide the technological environment, staff, and training necessary for the success of the redesign implementation (estimated time: 6 months, beginning FY2008Q2).
2. Phase 1 Tasks: Prepare for the redesign by gathering, analyzing, and prioritizing requirements, developing alternative solutions, and selecting the desired alternative (estimated time: 6 months, beginning FY2008Q3).
3. Phase 2 Tasks: Perform the redesign. Implement the solution selected in Phase 2 (estimated time: 16 months).

Several of the milestones in the Precursors and Phase 1 may begin concurrently. However, Phase 2 can not begin until all the Precursors and Phase 1 tasks are complete. Once the scope of the redesign is defined at the conclusion of Phase 1, a more precise timeline for the remaining tasks will emerge.

1. Precursors: OIS Web Content Services Team (6 months)

- a. Purpose: The precursors are activities that must be accomplished before the start of the redesign in order to provide the technological environment, staff, and training necessary for the success of the project.
- b. Identify redesign champion
- c. Hire and train Web Content Architect
- d. Hire and train the Project Manager for the redesign.
- e. Procure a Web Content Management Solution (CMS)
- f. Obtain Authority To Operate (ATO) for CMS (5 months)
- g. Train CMS Contributors

- h. Populate the CMS with existing site content
- i. Promote the CMS to production status

2. Phase 1: Prepare for the Redesign (6 months)

- a. Procure Redesign Support (2 months) – Project Manager with Web Content Services Team
 - 1. Purpose: Obtain expert contract assistance to perform the technical tasks of the redesign, including gathering and analyzing requirements, preparing alternative design strategies, and implementing the selected design alternative
 - 2. Issue RFPA
 - 3. Issue Federal Business Opportunities (FedBizOps) Notice
 - 4. Review Bids
 - 5. Award contract
 - 6. Hold kickoff meeting
 - 7. Familiarize contractors with environment
 - 8. Create CMS accounts for contract designers
- b. Prepare for Redesign Initiative (1 month) – Project Manager, leading the redesign working group
 - 1. Purpose: Establish the organizational support and knowledge for the redesign across the agency.
 - 2. Issue project plan
 - 3. Establish working group
 - 4. Hold teamwork training
 - 5. Issue working group charter
 - 6. Prepare communication plan
- c. Perform Requirements Analysis (3 months) – Redesign contractors, overseen by Web Content Services Team Project Officer, in coordination with Redesign Project Manager
 - 1. Purpose: Gather, analyze, and prioritize the requirements of a broad range of users of our Public Web Site, along with requirements and best practices from across the Federal government and private sector. This will result in report

documenting a series of prioritized, actionable items that form the basis for the core redesign tasks. The recommendations in this report will set the scope for the Phase 2 tasks.

2. Conduct focus groups
 1. Establish focus group schedule and methodology
 2. Create meeting agendas
 3. Compile attendee list with input from OEDO, Executive Team, Office Web Liaisons, the Web Content Services Team, and OPA
 4. Invite attendees
 5. Hold focus group meetings
 6. Interview key stakeholders
3. Compile requirements
 1. Compile user comments and concerns
 2. Analyze current site
 3. Prepare draft requirements report to include at least 3 alternative solutions and a cost/benefit analysis of each
 4. Distribute report to attendee list
4. Perform a content gap analysis
 1. Identify and prioritize technical requirements
 2. Assign content gaps to contributors and establish schedules for the contributions

3. Phase 2: Implement the Redesign (16 months)

- a. Prepare Redesign Mockups (3 months) – Redesign contractors, overseen by Web Content Services Team Project Officer, in coordination with Redesign Project Manager
 1. Purpose: To create at least three alternative approaches and designs for the redesigned site. This includes the information architecture, navigational features, and page designs for the site.
 2. Stage mockups in CMS
 3. Obtain and review stakeholder comments

4. Evaluate the strengths and weaknesses of each approach
 5. Validate each design in usability lab with stakeholders
 6. Identify and document preferred approach
 7. Present to senior managers
- b. Prepare Redesign Test Site (9 months) – Redesign contractors, overseen by Web Content Services Team Project Officer, in coordination with Redesign Project Manager
1. Purpose: To prepare a more formal presentation of the approach selected in the previous step. This will be hosted for review at the test Web site in the CMS.
 2. Establish test site and workflows
 3. Prepare templates
 4. Prepare custom page components
 5. Prepare site taxonomy and map
 6. Incorporate content from contributors to fill gaps
 7. Prepare and populate search collections
 8. Prepare internal and external announcements
- c. Validate Redesign Site (3 months) – Redesign contractors, overseen by Web Content Services Team Project Officer, in coordination with Redesign Project Manager
1. Purpose: To collect and analyze users' views on the selected design alternative and modify the draft site accordingly.
 2. Perform usability tests with internal stakeholders
 3. Open test site to the public for review
 4. Evaluate and prioritize comments
 5. Incorporate final pre-deployment changes
 1. Revise site content
 2. Update site taxonomy and map
- d. Deploy Site to Production (1 month) – Redesign contractors, overseen by Web Content Services Team Project Officer, in coordination with Redesign Project Manager

1. Purpose: To make final preparations and release the newly redesigned site to the public.
2. Switch development and production site roots in CMS
3. Purge Akamai cache
4. Perform post deployment testing
5. Prepare a Post Deployment Lessons Learned Report
6. Hold a seminar in the TWFN auditorium to introduce employees to the new site

Resources

We anticipate the redesign to take up to two years, including the precursor tasks which are already in progress. This effort is expected to extend into the middle of FY2010, although a more precise estimate of the schedule will likely emerge as a result of the scoping activity described in activity 4, above. Total resources necessary to support this effort are approximately 3 FTEs and \$1.5 to \$2.0 million in FY2009-FY2010. Of these resources, 1 FTE and \$1.5 to \$2.0 million are not budgeted. The information below details specific resource needs by office.

NRC Staff

All staff resources are expected to come from existing budgeted staff positions except the OIS project manager for this activity.

1. OEDO
 - a. Provide overall direction and coordination (a fraction of 1 FTE)
2. Program Offices (existing FTE for Web support: approximately 1.5 FTEs total)
 - a. Office Web Liaison (interfacing with OIS staff and communicate between offices)
 - b. Content Sponsors and Contributors (resource commitment varies by office)
 - c. Requirement providers (short-term commitment for requirements gathering interviews and meetings)
3. OIS
 - a. Project Manager (1 FTE)—planned GG-15 position to be assigned full time to this project
 - i. Provides the vision and direction for this project

- ii. Communicates to the Executive Team, Leadership Team, and Commission as needed
 - iii. Oversees the project plan and overall costs (as supported by the WCST Project Officer responsible for redesign contract management)
 - iv. Coordinates resource commitments and schedules and resolves conflicts between participating program offices
 - v. Relies on the Web Content Services Team for input regarding the daily activities associated with this project
- b. Web Content Services Team (0.5 FTE already budgeted)
- i. Manages contracts
 - ii. Coordinates and reviews changes to content
 - iii. Provides technical assistance and guidance
 - iv. Documents and revises policy (as set forth in MD 3.14³)

Contract Assistance Needed

The redesign effort is estimated to require the full-time services of at least 5 contractor staff at a rate estimated to be approximately \$120/hr (based on past contract experience expert usability costs from the 2001 redesign). The contractor staff will perform the following functions:

1. Contractor Staff (2): Industry Usability Experts
 - a. Gather, analyze, and document requirements. This activity includes gathering information from existing site statistics and user data, preparing for, coordinating, facilitating, and documenting interviews and focus groups to obtain specific requirements for the Public Web Site.
 - b. Perform usability studies. This activity includes managing a usability lab where stakeholders from across the NRC and its various external constituencies are used to test sample site and page designs and taxonomies.
2. Contractor Staff (at least 2): Content and Page Designers

³ Management Directive and Handbook 3.14, "U.S. Nuclear Regulatory Commission Public Web Site"

- a. Analyze the requirements gathered by the usability experts
 - b. Prepare at least three alternative approaches to meet those requirements, including both site information organizational structures and page layouts
 - c. Make adjustments to designs after usability studies are performed and as new content areas are added.
3. Contractor Staff (at least 2): Technical Editor/Writers
- a. Assist NRC staff in analyzing content gaps and preparing new pages to eliminate the gaps
 - b. Review content prepared by content contributors against the site standards
4. Contractor Staff (1): Project coordinator, writer, and administrative assistant
- a. Documents all group interactions and meetings
 - b. Tracks project tasks, resources, deliverables, costs, work breakdown structure, project plan, and earned value
 - c. Reviews all work products before delivery
 - d. Provides updates to the NRC at specified intervals
 - e. Provides lessons learned report and recommendations for future redesigns

Cost estimate: \$1.5 to 2 million (based on current hourly rates for contractors and including a contract usability facility).

NOTE: Depending on the vendors available, the specified requirements may be subsumed in a single contract or spread across multiple contracts.