# .gov Reform Initiative

# National Aeronautics and Space Administration Web Improvement Plan
Working Draft as of 10/11/2011

# Background

In the [August 12, 2011 Agency Instructions for Completing Web Inventories and Web Improvement Plans](), Agency CIOs were asked to work with their Agency Web Manager and Office of Public Affairs to submit an Interim Progress Report on their efforts to streamline Agency-managed .gov domains (due September 6, 2011) and to begin development of an Agency-wide Web Improvement Plan.

> "By October 11, Agencies shall develop a Web Improvement Plan that communicates their **strategy for managing web resources more efficiently, improving online content,** and **enhancing the customer experience of Agency websites**." This comprehensive plan will "address the broader objectives of **streamlining content, infrastructure,** and ultimately **improving customer service**."

The purpose of this Web Improvement Plan is to identify the strategy, actions, measurements, and timelines that the Agency is using to streamline website infrastructure, improve web content, and enhance the customer experience with Executive Branch websites.

Agencies are being asked to create a Web Improvement Plan that will be developed iteratively over the next few months. In this plan, Agencies will describe Agency-wide efforts to effectively manage publicly accessible websites in the .gov domain. Only agencies in the Executive Branch are required to submit a Web Improvement Plan. The initial plan for the National Aeronautics and Space Administration, due to OMB by October 11, 2011, is in the following section.

# Step 1: Current State of Agency-wide Web Improvement Efforts

Over the past few months, Agencies have been reviewing their .gov domains, web operations, and other web-related efforts in response to OMB .gov Reform data collection efforts (individual domain inventories, web governance survey, interim progress reports, etc.). The following describes the state of current web improvement efforts at the National Aeronautics and Space Administration.

## 1) Does your Agency currently have an Agency-wide web strategy?

no.

NASA does not have a separate agency-wide web strategy. NASA has an overall strategic plan, as well as a comprehensive agency-wide open government strategy and a NASA Information Resources Management Strategic plan.   Responsibilities for the Web are spread across multiple organizations.  The Office of the Chief Information Officer (OCIO) is responsible for infrastructure. The Office of Communications manages the Web content and information architecture at the agency level (www.nasa.gov). The remaining 3,447 web sites are managed separately by NASA's Mission Directorates and Field Centers, which have their own communication strategies. This is consistent with NASA's organizational structure and funding mechanisms for all projects, not just Web projects.

## 2) How does your agency currently ensure that Agency-wide web resources are managed efficiently (e.g. governance, technology/infrastructure, hosting, staffing, operations, etc.)?

There is no agency-wide direct coordination or management of web resources. The Office of the CIO manages resources and infrastructure for  www.nasa.gov  . Headquarters Mission Support Offices, Centers and Mission Directorates manage the resources for the remaining sites.  Most Centers have a defined process, through Application Control or Change Control Boards to review for policy compliance (IT Security, Accessibility Guidelines, applicable NASA policies and requirements, NASA Privacy Policy, Section 508 information, COPPA, export control,  etc).

There is a requirement for registration of the website and web application into a NASA-wide inventory tool. Some Centers have required centralized hosting infrastructure to leverage standardized platforms and tools. Many Mission Directorate web projects are funded independently and are managed using their own resources, including their own contracts.

Some centers have  developed a Customer Advocacy service office that is the central point of contact for web development requests. This allows Centers to review requirements and guide users toward existing infrastructure and resources that best meet their needs, and assist in project management when needed.

As part of NASA's Information Technology (IT) Infrastructure Integration Program (I3P), NASA OCIO is changing the way IT services are managed. This includes establishing a Web Services Board (WSB). The

purpose of the Web Services Board is to ensure that the services provided by the OCIO for the Agency's Web infrastructure are sufficiently provisioned across the Agency and Centers and that proper vetting has occurred to ensure quality service for all NASA Information Technology (IT) users.   The WSB also supports NASA's IT requirements for consistent service and performance, facilitating collaboration across the Agency and maintaining confidentiality, integrity, and availability of NASA's OCIO provided IT resources .

At the Agency level, there is a website and web application inventory cleanup initiative underway and to be completed by early December. These efforts will provide accurate, authoritative information about NASA's complex web presence and underlie the development of the web strategy.

There are also Agency-wide Boards and Working Group that are utilized for NASA-wide process. These include, Web Services Board, Social Media Working Group, Social Media Center Lead Working Group, and the www.nasa.gov Editorial Board.


## 3) How does your Agency currently ensure that website content is readily accessible, updated, accurate, and routinely improved?

For  www.nasa.gov  content, those responsibilities fall to the www.nasa.gov Editorial Board. This group, made up of representatives from communications, education and program and project offices across the agency, vets content through the appropriate offices and updates the site 24/7. Results of usability tests are incorporated into feature development to ensure that users' expectations are met. The board also utilize customer satisfaction surveys, customer feedback email and statistics to continuously improve website content.

There is no uniform agency-wide process for ensuring content on other NASA sites is accessible, updated, accurate or routinely improved. Individual programs and projects at the Centers and offices at NASA Headquarters manage their own content and are responsible for a ccuracy and accessibility. Some Centers use web statistics to determine which websites have the most traffic and which ones do not and may be candidates for decommissioning.

Most Centers have a review process for compliance and all Centers have a requirement for reviewing and renewing registration of public websites on a yearly basis. There are also periodic security scans conducted for vulnerabilities and non-responsive sites. Most Centers have a defined process, through Application Control or Change Control Boards for changes to websites in production.

There is no agency-wide process for reporting the results of these center processes or establishing any of them as best practices.

## 4) How does your Agency currently ensure that websites are meeting user expectations and needs and that the customer experience with websites is continually enhanced?

The www.nasa.gov Editorial Board ensures that it is meeting user expectations by reading feedback email; reviewing and analyzing web site statistics and customer-satisfaction data; and conducting usability testing. The result has been long-term growth in traffic to the site and continually increasing customer-satisfaction scores, among the best in the federal government. During the last redesign of the site, new features were tested with members of the target audiences in multiple rounds of usability testing. The new design has received significant increases in traffic and customer-satisfaction scores.

There is no uniform process for ensuring content on other NASA sites is meeting user expectations and that the customer experience is continually enhanced. Many Centers use web site statistics tools to determine usefulness of websites across the Center. Some also routinely conduct customer-satisfaction surveys to determine improvement areas. Some Centers use the Google Search appliance to provide users with meaningful search results and the ability to get more information through the "ask a librarian" link from the Google search results page. The responsibility for customer experience is typically placed on the site's Responsible NASA Official. However, NASA has no process for validating the results of these efforts or establishing best practices for the rest of the agency.