

**COMMENTS ON ADVANCE NOTICE OF PROPOSED RULEMAKING  
Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of  
State and Local Government Entities and Public Accommodations**

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U.S. DEPARTMENT OF JUSTICE**

**RESPONSE FILED BY:  
U.S. PUBLIC POLICY COUNCIL OF THE ASSOCIATION FOR COMPUTING  
MACHINERY**

On behalf of the U.S. Public Policy Council (USACM) of the Association for Computing Machinery (ACM) we are submitting the following comments in response to the Advance Notice of Proposed Rulemaking (ANPRM) by the Justice Department for the application of Title II and Title III standards of the Americans with Disabilities Act to Web-based information and services.

With nearly 100,000 members, the Association for Computing Machinery (ACM) is the world's largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. The ACM U.S. Public Policy Council (USACM) serves as the focal point for ACM's interaction with U.S. government organizations, the computing community, and the U.S. public in all matters of U.S. public policy related to information technology. Our comments are informed by our previously issued statement on Internet Accessibility.<sup>1</sup> Should you have any questions or need additional information, please contact Cameron Wilson, our Director of Public Policy, at 202-659-9711 or at [Cameron.wilson@acm.org](mailto:Cameron.wilson@acm.org)

### **Introduction**

While the ANPRM addresses the application of the ADA to Web-based information services, we note that Section 508 of the Rehabilitation Act mandates that United States federal department and agency Web sites be accessible to users with certain disabilities. The information technology and disability communities have developed accessibility standards and tools that federal agencies use to comply with those requirements, and which do not cause undue burden on the development and enhancement of covered sites. It makes sense to look at this work, as the Department has, when exploring how best to improve compliance with the ADA for Web-based material.

Aside from the specific technical questions with which the Department is concerned, we suggest the following recommendations to aid users, developers and providers of Web-based information and services prepare for the changes they may have to make to be more compliant with the ADA.

### **RECOMMENDATIONS**

*Promote Awareness* – The public does not have a full understanding of the Americans with Disabilities Act or how it already applies to the Web. Nor does it understand how improving accessibility of Web sites can often be a relatively inexpensive process. Educational resources aimed at improving awareness of the ADA, how it might apply to particular Web sites, and how Web site developers and operators might improve accessibility can reduce resistance and increase compliance.

*Encourage Tool and Software Development* – The department should encourage tool and software development to make it easier for developers and content providers to design accessible Web page and Web services. Improved tools for testing and auditing Web accessibility might provide clearer feedback and assistance in improving accessibility, thus simplifying the process of bringing sites into compliance.

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<sup>1</sup> Universal Internet Accessibility Policy Recommendations, <http://www.acm.org/public-policy/accessibility>  
1828 L Street Northwest, Suite 800 <http://usacm.acm.org/usacm> 202-659-9711 *tel*  
Washington, D.C. 20036 202-667-1066 *fax*

*Adopt the Section 508 Standards* – The current use of Section 508 standards for government Web sites gives them an edge over the WCAG 2.0 standards. It will be easier for Web developers and builders to work with a uniform standards rather than one set for federal Web sites and another for non-federal sites that must be ADA-compliant.

*Voluntary Certification* – We recommend that the Department establish a voluntary certification program for Web sites to demonstrate to visitors that the site is compliant with accessibility standards. This would complement the awareness promotion we recommend.

*Lead by Example* – Besides ensuring its own compliance with the ADA, federal government leadership in making its own Web sites compliant will help uncover useful tools and best practices that developers and builders can use in non-governmental Web sites.

*Seek Clarity About Compliance* – While the ADA already applies to the Web, there exists no guidance about what must comply, how to comply, and who is responsible for what parts of the compliance process, including auditing. Answering those questions must inform the rulemaking process, and resources must be available to make sure people who have these questions can have them answered once compliance becomes a requirement.

*Encourage Compliance, Not Removal* – Depending on how standards are set, implemented and supported, some Web sites may find it easier to remove content rather than comply with the law. Recognizing that the ADA already has undue burden provisions, the Department should still make sure that people understand the standards and how they can be achieved with reasonable means.

## Specific Questions

We now address some of the questions noted in the ANPRM. The questions are in *bold italics*.

***Question 1. Should the Department adopt the WCAG 2.0's "Level AA Success Criteria" as its standard for website accessibility for entities covered by titles II and III of the ADA? Is there any reason why the Department should consider adopting another success criteria level of the WCAG 2.0? Please explain your answer.***

If the Department wants to use a WCAG guideline, AA would be a good compromise between accessibility and practicality.

***Question 2. Should the Department adopt the section 508 standards instead of the WCAG guidelines as its standard for website accessibility under titles II and III of the ADA? Is there a difference in compliance burdens and costs between the two standards? Please explain your answer.***

We are in favor of using the same standards for both governmental and non-governmental Web sites, which would require the same approaches and tools for compliance. Given the existence and the statutory use of Section 508 Standards for government Web sites, we suggest adopting a standardized use of Section 508 guidelines. This would simplify matters by eliminating the need for parallel compliance regimes.

While Section 508 is not superior to WCAG, having two different standards will be confusing for developers and complicate enforcement. The existing pool of knowledge on accessibility among software engineers and Web developers and Web masters is not large. Having two separate sets of standards would increase confusion, rather than compliance. Widely used automated audit tools exist for both standards. Specific costs are not well documented. We expect that cost for implementing either set of standards would be similar due to the similarity in their technical requirements.

***Question 3. How should the Department address the ongoing changes to WCAG and section 508 standards? Should covered entities be given the option to comply with the latest requirements?***

To address the ongoing changes to WCAG and Section 508 standards, the Justice Department should be ready to assist developers by providing information about tools and audit service resources that will help covered entities achieve compliance. Because of the investment cycle in Web development services, it would be reasonable to define a compliance timeframe that reduces the investment needed for site and content revision. We recommend that full compliance with the most recent standards be required when major revisions are enacted and when new content is developed. Providing covered entities with the option to update new versions of existing standards, perhaps with a lag time for implementation, would be reasonable, particularly given the range of federal Web sites that are not yet Section 508 compliant.

***Question 4. Given the ever-changing nature of many websites, should the Department adopt performance standards instead of any set of specific technical standards for website accessibility? Please explain your support for or opposition to this option. If you support performance standards, please provide specific information on how such performance standards should be framed.***

The Department should adopt performance standards. Both the WCAG and Section 508 standards represent community understanding of the measures needed to make Web sites accessible. We know of no practical alternatives to those standards, and any gaps in the standards reflect a lack of research knowledge from which to make design recommendations. Whatever technologies are used, covered Web sites should be audited in a consistent manner based on what is demonstrably accessible. For example, the requirements for tagging graphics with text for use by text-to-speech conversion should be measured by the percentage of images that have alternative textual descriptions. Given the rapid technological development in Web technology, requiring the use of specific design standards would limit this development to the detriment of all.

***Question 5. The Department seeks specific feedback on the limitations for coverage that it is considering. Should the Department adopt any specific parameters regarding its proposed coverage limitations? How should the Department distinguish, in the context of an online marketplace, between informal or occasional trading, selling, or bartering of goods or services by private individuals and activities that are formal and more than occasional? Are there other areas or matters regarding which the Department should consider adopting additional coverage limitations? Please provide as much detail as possible in your response.***

The department should craft regulations that acknowledge potential distinctions and differences in responsibility between those who provide services for creating and providing Web pages, and those who use those services for developing Web pages.

Pages that are on a site that provides a service or a connection between private individuals—eBay, Google sites, etc.—can be constructed and constrained to force/require/mandate compliance—HTML template editors and site construction tools can be designed to create accessible sites by definition. For example, eBay pages are highly structured—the tools that build these pages can be designed to enforce accessibility requirements. In any case, the Department should clearly describe who is responsible for which accessibility requirements. For example, a business that lets users create personal Web pages (Myspace, Google) might be required to make their own pages accessible, but they should not be responsible for the accessibility of client pages. Its template pages, however, should be designed according to accessibility standards. However, online businesses that completely control content on their sites should face corresponding responsibility for making that content accessible. Education Web sites (e.g. pages housed on a university Web site) present particular challenges, as content developed by individual instructors can often be found alongside pages developed by the institution. We recommend that all electronic components of Web-based or Web-supported education be covered, without limitations or exemptions for any components of education not already present in the law.

***Question 6. What resources and services are available to public accommodations and public entities to make their websites accessible? What is the ability of covered entities to make their websites accessible with in-house staff? What technical assistance should the Department make available to public entities and public accommodations to assist them with complying with this***

*rule?*

While many software tools, both free and proprietary, exist to assist users in making Web sites accessible, there are no standards to certify the accuracy of these tools. There are also difficulties in interpreting audit reports, and it can be difficult to link the output of an audit report to meaningful accessibility. We suggest that resources and services to assist public accommodations be made available through the existing network of Disability and Business Technical Assistance Centers (DBTACs), which support businesses in their activities towards reaching ADA compliance.

The Department of Justice rules and requirements should be as clear as possible, thereby enhancing compliance. The DOJ should clearly state how accessibility will be measured. Furthermore, we recommend that there be a (voluntary) certification process to provide consumers with a means to determine that a Web site meets the Department's requirements. At the same time, if accessibility tools are used and provide inaccurate information about site accessibility, the public accommodation that relied on the tool should not be held liable. Finally, we recommend that the DOJ set up FAQs and tools to assist covered entities in determining which requirements a person, business, or institution must meet. We also suggest that the DOJ provide best practices documents describing preferred approaches for achieving accessibility—particularly given new and evolving technology.

***Question 7. Are there distinct or specialized features used on websites that render compliance with accessibility requirements difficult or impossible?***

The difficulty of achieving compliance is likely to be a function of the type of content, and, in some case, its age. New text content, including HTML and documents in Word or PDF formats can easily be created to be accessible, but some existing PDFs that include text from scanned paper may be difficult to make accessible without potentially difficult and error-prone optical character recognition. Video and audio accessibility might be achieved via commercially available and relatively inexpensive transcription software.

Interactive Web site features such as drop-down menus or mouse-over actions can be relatively easy to make accessible if they are written using the Javascript language supported by all common Web browsers. These features can generally be made accessible through careful design of the scripting code. Other components using Java, Flash, or other highly-interactive plugins may be difficult, if not impossible, to provide in an accessible manner. In these cases, site developers may be able to provide equivalent content in an alternative, accessible presentation. However, providing alternative content can create additional complexity and expense that may create undue burdens for smaller covered entities. At the same time, alternative content and applications may be updated less frequently, leading to concerns that this content would be “separate but unequal”. For this reason, we encourage compliance to design standards that allow accessibility to be realized through assistive technologies.

***Question 8. Given that most websites today provide significant amounts of services and information in a dynamic, evolving setting that would be difficult, if not impossible, to replicate through alternative, accessible means, to what extent can accessible alternatives still be provided? Might viable accessible alternatives still exist for simple, non-dynamic websites?***

Yes, in many cases. Full-page reloads and non-Flash can provide most, if not all, of the content that can be provided with more advanced technology, albeit with less interaction. Some development environments include features that will gracefully degrade to provide greater accessibility. This would be another situation in which it makes sense to encourage compliance to design standards that allow accessibility to be realized through assistive technologies.

***Question 9. The Department seeks comment on the proposed time frames for compliance. Are the proposed effective dates for the regulations reasonable or should the Department adopt shorter or longer periods for compliance? Please provide as much detail as possible in support of your view.***

Because the US Government will need to serve as a role model in Web accessibility, and because many federal Web sites currently are inaccessible, we suggest that the US government first move

towards making their Web sites accessible, and establish best practices and techniques to assist other public accommodations in making their Web sites accessible.

Many sites can be made compliant with minimal effort. Sites that cannot be promptly revised might be required to post an accessibility statement that notes which resources are not accessible, and what steps are currently being taken to make those resources accessible, as well as contact information for requesting alternative materials.

A six-month effective date for newly created Web sites or pages is reasonable, given the availability of tools to make Web pages compliant and the relative ease of making new pages accessibility compliant compared to converting existing pages. A two-year effective date for existing Web sites or pages, however, may be problematic. Even with the provision for 'maximum extent feasible,' a combination of resource challenges (both time and financial) and scope may make it difficult for some content providers to comply within that timeframe. Perhaps guidance would be appropriate on whether the undue burden provisions of the ADA might be relevant in these instances to at least extend the period of time for compliance.

***Question 10. The Department seeks comment regarding whether such a requirement would cause some businesses to remove older material rather than change the content into an accessible format. Should the Department adopt a safe harbor for such content so long as it is not updated or modified?***

Older material on the Web, if still accessed on a regular basis, must be made accessible. We recognize that there could be a backlog in making older material accessible, but policies should be designed to encourage making existing (including legacy) content accessible, and avoid requirements that might prompt developers and content providers to remove content. Web site operators should be expected to make all currently accessed content accessible to the extent that affordable and available software exists to manage the process. If those tools are not available, site providers should be encouraged to provide comparable alternatives to the greatest extent possible. The use of such tools should be considered sufficient for any safe harbor provisions being considered by the Department.

***Question 11. Should the Department take an incremental approach in adopting accessibility regulations applicable to websites and adopt a different effective date for covered entities based on certain criteria? For instance, should the Department's regulation initially apply to entities of a certain size (e.g., entities with 15 or more employees or earning a certain amount of revenue) or certain categories of entities (e.g., retail websites)? Please provide as much detail and information as possible in support of your view.***

Although larger organizations may have relatively greater resources available, the difficulty of making Web sites accessible is not necessarily a function of the size of the of an organization or the purpose of a Web site. Content management and template tools often reduce the difficulty, as modifications that make one template accessible may in fact cover a substantial portion of a large site. Other questions of prioritization or incremental adoption are largely not technical and therefore beyond the scope of our expertise to comment.

***Question 12. What data source do you recommend to assist the Department in estimating the number of public accommodations (i.e., entities whose operations affect commerce and that fall within at least one of the 12 categories of public accommodations listed above) and State and local governments to be covered by any website accessibility regulations adopted by the Department under the ADA? Please include any data or information regarding entities the Department might consider limiting coverage of, as discussed in the 'coverage limitations' section above.***

Although numbers of some public institutions such as state governments and universities may be easy to measure, we do not have knowledge of the number of other public accommodations.

***Question 13. What are the annual costs generally associated with creating, maintaining, operating, and updating a website? What additional costs are associated with creating and maintaining an***

***accessible website? Please include estimates of specific compliance and maintenance costs (software, hardware, contracting, employee time, etc.). What, if any, unquantifiable costs can be anticipated from amendments to the ADA regulations regarding website access?***

Due to wide variations in scope, complexity, size, and traffic volume, Web sites can have huge variations in costs. Creating an accessible Web site from scratch can have a minimal added overhead. While there are real costs involved with retrofitting existing Web sites (or Web resources) for accessibility, we believe that all newly designed sites should be required to build sites that comply with the latest accessibility standards.

***Question 14. What are the benefits that can be anticipated from action by the Department to amend the ADA regulations to address website accessibility? Please include anticipated benefits for individuals with disabilities, businesses, and other affected parties, including benefits that cannot be fully monetized or otherwise quantified.***

Benefits include improved access to public information, social and health care services, education, employment opportunities and resources (many of which are now primarily available online), as well as economic benefits from online-only consumer discounts.

***Question 15. What, if any, are the likely or potential unintended consequences (positive or negative) of website accessibility requirements? For example, would the costs of a requirement to provide captioning to videos cause covered entities to provide fewer videos on their websites?***

One consequence may be the removal of content. However, better tools, exemptions for small providers, and market forces, may help ensure that captioning requirements do not prompt content providers to remove content that may be challenging to make compliant with accessibility standards. One possibility of an unintended consequence might be in new approaches to privacy and security. For example, if new security approaches are developed that depend on responses to visual materials, they may not be compliant to accessibility standards.

We are concerned that worries about the perceived expense and difficulty of improved accessibility might lead some Web site operators to simply remove content, instead of making it accessible. Active education efforts, including reminders of the undue burden clause, might help site operators better understand their obligations, thereby encouraging greater compliance.

A positive unintended consequence of video captioning is the benefits in increased literacy to citizens without disabilities, including citizens for whom English is a second language, or those with limited exposure to reading time.

***Question 16. Are there any other effective and reasonably feasible alternatives to making the websites of public accommodations accessible that the Department should consider? If so, please provide as much detail about these alternatives, including information regarding their costs and effectiveness in your answer.***

We strongly encourage that public accommodations be required to make their core Web content accessible, and not provide separate accommodations, which often wind up being unequal. For example, when airlines Web sites are inaccessible, people with disabilities who are encouraged to call the airline often wind up being charged higher fares. “Separate but equal” accommodations are often unequal and inferior.

***Question 17. The Department seeks input regarding the impact the measures being contemplated by the Department with regard to Web accessibility will have on small entities if adopted by the Department. The Department encourages you to include any cost data on the potential economic impact on small entities with your response. Please provide information on capital costs for equipment, such as hardware and software needed to meet the regulatory requirements; costs of modifying existing processes and procedures; any affects to sales and profits, including increases in business due to tapping markets not previously reached; changes in market competition as a***

***result of the rule; and cost for hiring web professionals for to assistance in making existing websites accessible.***

Although retrofitting existing Web sites to improve accessibility may be a somewhat challenging task, newly designed or redesigned sites can generally be implemented with accessibility in mind without additional expense or difficulty. With minimal extra training, and using existing hardware and software, most Web professionals should be able to adapt their practices to include accessibility concerns. If accessibility is included in Web development best practices, added costs should be minimal.

Businesses that make their sites more accessible can anticipate the possibility of identifying new customer bases of individuals who were previously unable to use the sites due to accessibility limitations. For many businesses, their potential market may increase when they make their Web sites accessible.

***Question 18. Are there alternatives that the Department can adopt, which were not previously discussed in response to Questions 11 or 16, that will alleviate the burden on small entities? Should there be different compliance requirements or timetables for small entities that take into account the resources available to small entities or should the Department adopt an exemption for certain or all small entities from coverage of the rule, in whole or in part. Please provide as much detail as possible in your response.***

DOJ should provide resources that will help small entities understand their obligations and how to meet them. Specifically, clearly understood resources describing requirements and available tools for creating Web pages and auditing accessibility would be very helpful, as would explanations of procedures for documenting accessibility efforts. The DOJ might also specifically identify freely available or open source tools that might be used to meet requirements. If Section 508 guidelines are adopted, the DOJ should assume responsibility for providing information about them.

***Question 19. The Department is interested in gathering other information or data relating to the Department's objective to provide requirements for Web accessibility under titles II and III of the ADA. Are there additional issues or information not addressed by the Department's questions that are important for the Department to consider? Please provide as much detail as possible in your response.***

It is important to note that differences in behavior across different browsers will mean that even something that passes accessibility testing may be found to be inaccessible in practice. We hope that DOJ develops approaches to deal with the frequent changes in Web sites, while stating specifically how compliance should be tested and measured. There need to be specific requirements for how compliance will be measured, so that companies and organizations can easily determine whether or not they are in compliance with the law.

## CONCLUSION

We see this ANPRM as the first part of a long process. This process extends beyond the rulemaking process that the Department has started. To ensure maximum compliance with whatever final guidance is issued, the following issues need to be part of the planning and implementation of that guidance.

### *Raise Awareness*

A series of activities designed to publicize the rulemaking and the need to make content on the World Wide Web maximally accessible would significantly increase awareness of the value of building accessibility into systems that provide Web-based information and services. Organizations like the

Access Board and those groups who have developed Web accessibility standards like the WCAG 2.0 or Section 508 standards would be natural partners in such efforts. Developing and publicizing Web resources that can be used to increase Web site accessibility (without significant expense) can help allay concerns that compliance would be overwhelming.

Educational efforts –targeted at Web developers, content providers and those who develop tools used to build Web sites- should also stress the view of accessibility as the absence of barriers that would prevent individuals with cognitive, perceptual, or motor disabilities from accessing services, programs, and information provided online by covered entities through Web-based content, systems, and infrastructures. These educational efforts should discuss the importance of accessibility as adhering to standards in design that enable users to utilize additional functionality that addresses their limitations.

#### *Better Tools*

Despite the existence of accessibility standards for the Web, many have not placed accessibility as a key consideration in the design, development, and implementation of Web-based applications, content, and tools. These applications, content and tools have been widely adopted, and may pose some challenges to successful implementation of the proposed rules. Researchers have noted that since 2004 the accessibility of Web sites for the Fortune 100 companies has not improved significantly.<sup>2</sup> The Department of Justice should engage with relevant experts at the National Institute of Standards and Technology and elsewhere in the government, as well as academic and industry leaders, to determine how to encourage the development of software and tools that embrace accessibility by design.

#### *Reduce Uncertainty and Increase Clarity*

Specific requirements and standards that the Department chooses to apply need to be straightforward and focus on performance goals rather than be directive about design parameters. This will allow developers and providers of information and services to focus on achieving compliance rather than stipulating design. If we reduce the uncertainty over terms like “operator” of a Web site by referencing specific parties and their responsibilities, then fewer people will be inclined to remove their content or services from the Web. The parties responsible for compliance among content and service providers for specific accessibility performance parameters must be clear because it will be challenging to realize accessibility goals in the dynamic content environment of the Web.

Tools associated with auditing the accessibility of Web content should meet the standard of producing the same results when testing the same Web content for compliance. It may be necessary to not only specify what guidelines must be followed to assure compliance, but also what tools, tests, or other processes must take place in order to audit for compliance.

We recommend the crafting of accessibility requirements that recognize the values of accessible participation and innovation, and the extension of those requirements to public, commercial Web sites that fall under relevant ADA jurisdiction. In addition, we recommend that well-known and well-vetted standards like the Section 508 standards serve as the starting point for enhancing and extending accessibility requirements for all people to public, commercial Web sites.

#### *Older Web Content*

Converting older content to be compliant with accessibility standards will generally require more time and investment than designing new content compliant with accessibility standards. Recognizing the existing provisions for undue burden within the ADA, Web content that cannot currently be

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<sup>2</sup> Loiacano, Eleanor T., Nicholas Roman, Scott McCoy, “The State of Corporate Website Accessibility,” *Communications of the ACM* 52:9, 128-132 (2009) and Loiacano, Eleanor T. “Cyberaccess: web accessibility and corporate America,” *Communications of the ACM* 47:12, 82-87 (2004).

transcribed by commonly available software tools may constitute such a burden to covered entities. However, the capabilities of software tools change, and what might not be reasonably converted today may be more easily converted at some future point. While we prefer performance standards to design standards whenever possible, it would be particularly important to emphasize a performance standard rather than a design standard when establishing compliance rules for older content.

The aging of our population makes the accommodations provided by the ADA particularly important, as individuals who may be currently able-bodied may experience loss of vision or other disabilities associated with aging. Additionally, ADA compliance on the Web will not just benefit those with the conditions we typically associate with disabilities. By following principles of universal design and universal usability, developers can build Web sites at reasonable cost that account for wide ranges in physical abilities, technical capabilities of devices used to access the Web, and user knowledge, resulting in an Internet that is both more accessible and more usable. Actions taken today that are intended to increase compliance with the ADA have the potential to increase participation online across all categories of society, regardless of current or future ability.