



May 28, 2015

Via Electronic Filing

Office of Technical and Informational Services
U.S. Access Board
1331 F Street NW, Suite 1000
Washington, DC 20004-1111

Re: Comments in Docket No. ATBCB-2015-0002, RIN No. 3014-AA37

Dear Chair Pavithran and Members of the Access Board:

Google submits the following comments to the Architectural and Transportation Barriers Compliance Board (“Board”) for consideration in its proceeding to update the Information and Communications Technology (“ICT”) Standards and Guidelines pursuant to Section 508 of the Rehabilitation Act of 1973 and Section 255 of the Communications Act of 1934.¹

The Board’s overarching goals in this proceeding—to ensure that ICT is accessible to and usable by individuals with disabilities—parallel important components of Google’s objectives as a company. Our mission is “to organize the world’s information and make it *universally accessible and useful*.” To this end, Google offers an ever-broader array of ICT products and services—from mobile devices such as Nexus tablets and Chromebooks—to web-based services such as Docs and YouTube. Simply stated, we strive to build products that will make the web better. And we believe web technologies offer endless possibilities to enhance people’s lives. We recognize that disabled users face greater challenges in accessing and utilizing technology and the benefits of the Internet, and we aim to build solutions to the problems these users face every day.

Google is a longstanding member of the World Wide Web Consortium and we have played a key role in developing the Web Content Accessibility Guidelines.² We have established a team of engineers, known as the “Accessibility Engineering Team” to monitor the state of accessibility of Google products and coordinate accessibility

¹ Notice of Proposed Rulemaking, Information and Communication Technology (ICT) Standards and Guidelines, 80 Fed. Reg. 10880 (Feb. 27, 2015), available at: <http://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/proposed-rule/single-file-version> (“NPRM”) (Citations herein are to page numbers in the single-file version).

² Google’s Loretta Guarino Reid serves as Co-Chair on the WCAG Working Group and is one of the editors of the WCAG 2.0.

training, testing, and consulting. In addition, every new engineer hired at our engineering headquarters in Mountain View, CA and Zurich, Switzerland must take an accessibility engineering class to learn how to incorporate accessibility principles into the design and release of products. We have also launched an accessibility website that displays various accessible products and features we offer, and solicits feedback to provide a forum for the exchange of ideas about how to make web content even more accessible. In sum, we are committed to making accessibility a core consideration throughout our product development process—from the earliest stages of product design, through development, evaluation, testing and release.

We also believe it is important to spur other innovators to incorporate accessible design into the products they develop. Equipping our platforms with built-in accessible features and accessibility APIs should encourage and enable software and application developers to address the needs of disabled users as more technologies and services migrate to the cloud. Recognizing that the “cloud” poses unique challenges for some users, our two major platforms, Chrome and Android, are increasingly more equipped with a range of built-in accessible features. Android provides text-to-speech, haptic feedback, gesture navigation, trackball, and directional pad navigation. These features help users navigate their devices more easily. Chrome OS has a built in screen reader - ChromeVox - designed to help bring the speed, versatility and security of the Chrome OS to visually-impaired users. We are focused on the use of accessibility APIs as an important means for spurring innovation in accessible design.

While Google is not itself subject to the Section 508 requirements, Google collaborates closely with advocacy groups and government organizations around the world to understand how our products are used and how they can work better for users with disabilities. We employ many individuals with disabilities and are at the forefront of developing technologies to serve their needs. We also support academic research that has the potential to impact the lives of people with disabilities globally.³ Accessibility is an important global initiative for Google, as it is for many other leaders in the technology industry. It is from this perspective that we offer the following comments on the Board’s Notice of Proposed Rulemaking.

1. The Board should permit ICT that meets the European Standard (ETSI EN 301 549) to be deemed compliant with Section 508 regulations and Section 255 Guidelines.

Global harmonization of standards plays a critical role in increasing ICT accessibility for people with disabilities. Harmonized standards spur innovation and enable companies to increase the impact of their investments in accessible technologies. Indeed, efforts to create the WCAG were based on the principle that harmonization is essential for web accessibility.⁴ As the Executive Branch has long

³ Google’s Accessibility Initiatives are outlined at <http://www.google.com/accessibility/initiatives-research.html>.

⁴ See Web Accessibility Initiative, Why Standards Harmonization is Essential to Web Accessibility, available at <http://www.w3.org/WAI/Policy/harmon>.

recognized in its efforts to ensure that federal agencies reduce their reliance on government-unique standards, harmonization also facilitates trade and promotes efficiency and competition.⁵ It does so by decreasing the amount of resources companies have to devote to complying with many localized regulations that sometimes conflict and very often require companies to offer different versions of their products in different jurisdictions. For these reasons, Google applauds the Board's efforts to work with leaders in other countries to harmonize standards across markets within the Telecommunications and Electronic and Information Technology Advisory Committee as well as its efforts to participate in the development of the European Standard.⁶

Recognizing the critical role global harmonization plays in the development of accessible ICT, the Board explains:

*"a number of voluntary consensus standards have been developed by standards organizations worldwide over the past decade. Examples of these standards include: the Web Accessibility Initiative's Web Content Accessibility Guidelines (WCAG) 2.0, EN 301 549 V1.1.1 (2014-03), "Accessibility requirements for public procurement of ICT products and services in Europe," and the Human Factors Ergonomics Society's ANSI/HFES 200.2 (2008) ergonomics specifications for the design of accessible software. The harmonization with such international standards and guidelines creates a larger marketplace for accessibility solutions, thereby attracting more offerings and increasing the likelihood of commercial availability of accessible information and communication technology options."*⁷

The Board cites the development of these standards, along with dramatic technological advances, as the primary bases for revising the current 508 Standards and 255 Guidelines.⁸ But although the Board makes several proposals that are similar to the requirements in the European Standard, and adopts the WCAG 2.0 as a reference standard, it stops short of proposing an approach that aligns with the European Standard in the way that would most effectively promote accessible ICT across various markets. Google recognizes that the European Standards are not applicable to certain types of technology used in the United States.⁹ But permitting ICT that meets the European Standard to be deemed compliant with Section 508 regulations and Section 255 guidelines would create a more unified market for accessible ICT. This approach would also reduce significantly the burden on industry of compliance with fragmented, localized regulations, with no reduction in the accessibility of ICT covered by the Board's new rules.

⁵ OMB Circular, A-119, available at https://www.whitehouse.gov/omb/circulars_a119/.

⁶ NPRM at 33-34.

⁷ *Id.* at 9.

⁸ *Id.* at 8-9.

⁹ *Id.* at 34-36.

2. The Board Should Follow the Approach in the European Standard for Audio Description and Closed Captioning Controls.

The Board has asked whether its proposed 413.1 offers device manufacturers sufficient design flexibility and whether the requirement for a captioning button be limited to certain types of hardware.¹⁰ In the event that the Board does not permit equipment that satisfies the European Standard to be deemed compliant with the 508 Requirements and 255 Guidelines as set forth above, Google recommends that the Board follow the ETSI EN 301 549 approach in Section 7.3 for user controls for captions and audio description. Section 7.3 of the European Standard provides:

Products that have a general hardware volume control, such as a telephone, or a laptop which can be configured to display video through software but which is not the primary purpose, would not need dedicated hardware controls for captions and descriptions; however software controls, or hardware controls mapped through software, would need to be at the same level of interaction.¹¹

The Board's proposed hardware requirements would require ICT that displays video with synchronized audio, to provide user controls for closed captions and audio description conforming to 413.1.¹² While 413.1 makes an exception for "devices for personal use where closed captions and audio description can be enabled through system-wide platform settings,"¹³ an important distinction must be made with respect to platform settings and applications that enable the viewing of video programming with synchronized audio.

Mobile phones, tablets, laptop computers, and similar devices that have video playback as a secondary function typically require a user to open a software application in order to view video programming. These software applications offer settings like volume control, or closed captioning on a toolbar. YouTube displays these settings on the toolbar just below the video being viewed. It makes sense that closed captioning and audio description controls be incorporated into these software applications in the same way that volume controls are presented to users within the software applications, and 503.4 requires software and web applications to do this.¹⁴ But it would severely restrict hardware design to require that such user controls be included in actual device controls for multi-purpose devices.

The better approach is to follow the European Standard, Section 7.3, Note 2, which does not require dedicated hardware controls for captions and descriptions for devices that only play back video as a secondary function. This approach logically requires that software controls, or hardware controls mapped through software be "at

¹⁰ *Id.* at 113.

¹¹ European Standard at 33, 7.3, Note 2.

¹² NPRM at 112-113; 195.

¹³ *Id.* at 195.

¹⁴ *Id.* at 120 (explaining proposed on-screen controls for captioning and audio description for software and applications).

the same level of interaction.” This means, if a user has to open an application to play video programming on one of these devices, the logical place for the user to change settings is in a prominent location in the application/software through which the user is playing the video, where controls for play, pause, stop, volume, and secondary audio would be located.

In addition to adopting the approach in the European Standard with respect to user controls for audio description and closed captioning, the Board should also recognize, as a practical matter, that content providers and originators must provide embedded audio description and closed captioning in order for application and service providers to *pass-through* embedded codes so that users can activate them. Currently, video content with embedded closed captioning can be played with YouTube’s captioning button activated, but video content uploaded into YouTube that contains audio description is uploaded as a separate file. For the Board’s requirement to have its intended impact, covered entities must upload video content that contains embedded audio description, which then can be activated and deactivated using the user controls provided by the platform or application, rather than upload video content as a separate, audio-description-only file with no ability to deactivate and reactivate the audio description feature.¹⁵

3. The Board should ensure that its proposed standard, 410.7 Caller ID, does not interfere with any policy matters addressed by the Federal Communications Commission.

The Board has proposed the following text in 410.7 to cover Caller ID and similar functions.

410.7 Caller ID. Where provided, caller identification and similar telecommunications functions shall be visible and audible. Advisory 410.7 Caller ID. Examples of functions addressed by this requirement include messages waiting, duration of call in progress, dialing directory, wireless signal strength, and battery power.

Many IP-based calling services are different from traditional telephone services with respect to Caller ID features. Google Voice, for example, permits a subscriber to choose a new telephone number to use for Google Voice, and to link her existing telephone numbers to this new number so she can use one number for all her phones. When she uses Google Voice to make a call from her computer, her Google Voice number will display on the called party’s Caller ID. But if she makes a call in Hangouts, which is another Google calling service, the Caller ID will show the number as “unknown.” Providers of IP-based calling services should continue to have the flexibility of offering unique services that utilize various approaches to Caller ID display.

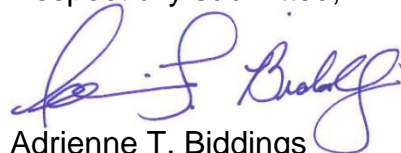
¹⁵ The FCC’s rules concerning closed captioning of video programming delivered using Internet protocol contain distinct obligations for video programming owners, distributors and providers. Distributors and providers are required to enable the rendering or pass through of all required captions to the end user, whereas the owners of video programming are required to send covered program files to video programming distributors and providers with captions. 47 C.F.R. § 79.4(c).

Google supports the principle of making Caller ID information and similar telecommunications functions accessible. But Google urges the Board to ensure that the proposed requirement in 410.7 is applied only with respect to the requirement to make that Caller ID information that is present both visible and audible, not to require service providers to supply additional Caller ID information. We believe the current wording accomplishes this because the requirement is qualified by the language “where provided.” The Board should refrain from modifying the proposed requirement in any way that would alter service providers’ obligations to supply additional Caller ID information. Any such modifications potentially could interfere with policy matters the FCC has addressed or may address in the future with respect to Caller ID, blocking, unmasking, and spoofing.

Conclusion

Google is committed to promoting the expansion of digital accessibility and improving everyone’s access to the innovative technologies. Improving accessibility is a global initiative and greater harmonization of standards will increase incentives for manufacturers and service providers to develop more accessible ICT products and services. The Board should be careful not to upset global trends towards accessibility by mandating strict technical standards that are out of step with technology trends and industry standards. The Board should continue its efforts to harmonize accessibility standards across markets by aligning more closely with the European Standard ETSI EN 301 549 by permitting ICT that meets this standard to be deemed compliant with the Section 508 rules and Section 255 guidelines.

Respectfully submitted,



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