



About the U.S. Access Board's Update of the Section 508 Standards and Section 255 Guidelines for Information and Communication Technology

On January 18, 2017, the U.S. Access Board published a final rule updating accessibility requirements for information and communication technology (ICT) covered by Section 508 of the Rehabilitation Act and Section 255 of the Communications Act. This document provides an overview of the rule and highlights substantive changes to the ICT requirements. The preamble to the final rule discusses the requirements in greater detail.

Updated Section 508 Standards for Federal ICT

The Access Board's final rule revises and refreshes its standards for information and communication technology in the federal sector covered by Section 508 of the Rehabilitation Act of 1973. The Board's Section 508 Standards, which were first issued in 2000, apply to ICT developed, procured, maintained, or used by federal agencies. Examples include computers, telecommunications equipment, multifunction office machines such as copiers that also function as printers, software, websites, information kiosks and transaction machines, and electronic documents.



Updated Section 255 Guidelines for Telecommunications Equipment

The Board's final rule also updates guidelines for telecommunications equipment covered by Section 255 of the Communications Act of 1934, as amended. The Section 255 Guidelines, which the Board initially published in 1998, cover telecommunications equipment and customer premises equipment, including telephones, cell phones, routers, set-top boxes, and computers with modems, interconnected Voice over Internet Protocol products, as well as software integral to the operation of telecommunications function of such equipment.

Goals of the Refresh

The Board updated the 508 Standards and 255 Guidelines jointly to ensure consistency in accessibility across the spectrum of information and communication technologies (ICT) covered. Other goals of this refresh include:

- enhancing accessibility to ICT for people with disabilities;
- making the requirements easier to understand and follow;
- updating the requirements so that they stay abreast of the ever-changing nature of the technologies covered; and
- harmonizing the requirements with other standards in the U.S. and abroad.

How the Final Rule was Developed

The Access Board initiated this update by organizing an advisory committee to review the original 508 Standards and 255 Guidelines and to recommend changes. The 41 members of the Telecommunications and Electronic and Information Technology Advisory Committee (TEITAC) comprised a broad cross-section of stakeholders representing industry, disability groups, and government agencies. Its membership also included representatives from the European Commission, Canada, Australia, and Japan. The committee addressed a range of issues, including new or convergent technologies, market forces, and international harmonization and submitted its report to the Board in April 2008. Recognizing the importance of standardization across markets worldwide, the committee coordinated its work with standard-setting bodies in the U.S. and abroad, including the World Wide Web Consortium (W3C) and the European Commission.



The Board released drafts of the rule based on the committee's report in 2010 and 2011 and followed up with an official notice of proposed rulemaking in February 2015. With each release, the Board held public hearings and solicited public comment. Over the course of this rulemaking, the Board held seven public hearings and received over 630 comments.

Major Changes

The final rule revises both the structure and substance of the ICT requirements to further accessibility, facilitate compliance, and make the document easier to use. Major changes include:

- restructuring provisions by functionality instead of product type due to the increasingly multi-functional capabilities of ICT;
- incorporating the Web Content Accessibility Guidelines (WCAG) 2.0 by reference and applying Level A and Level AA Success Criteria and Conformance Requirements to websites, as well as to non-web electronic documents and software;
- specifying the types of non-public facing electronic content that must comply;
- requiring that operating systems provide certain accessibility features;
- clarifying that software and operating systems must interoperate with assistive technology (such as screen magnification software and refreshable braille displays);
- addressing access for people with cognitive, language, and learning disabilities; and
- harmonizing the requirements with international standards.

Incorporation of the Web Content Accessibility Guidelines (WCAG)

The final rule incorporates by reference a number of voluntary consensus standards, including WCAG 2.0. Issued by the W3C's Web Accessibility Initiative, WCAG 2.0 is a globally recognized, technology-neutral standard for web content. The final rule applies WCAG 2.0 not only to web-based content, but to all electronic content. The benefits of incorporating the WCAG 2.0 into the Section 508 Standards and the 255 Guidelines and applying it in this manner are significant. WCAG 2.0 addresses new technologies and recognizes that the characteristics of products, such as native browser behavior and plug-ins and applets, have converged over time. A substantial amount of WCAG 2.0 support material is available, and WCAG 2.0-compliant accessibility features are already built into many products. Further, use of WCAG 2.0 promotes international harmonization as it is referenced by, or the basis for, standards issued by the European Commission, Canada, Australia, New Zealand, Japan, Germany, and France.



Harmonization with European Commission ICT Standards

Harmonization with international standards and guidelines promotes greater accessibility worldwide, enhances uniformity, and heightens market incentives for integrating accessibility into information and communication technology. Throughout the rulemaking process, the Board coordinated its refresh with the European Commission's development of counterpart ICT accessibility standards. In 2014, the European Commission adopted the "Accessibility requirements for public procurement of ICT products and services in Europe" (EN 301 549) which is available for use by European government officials as technical specifications or award criteria in public procurements of ICT products and services. The Board has worked to ensure broad harmonization between its ICT requirements and the European Commission's standards (as revised in 2015).



Structure of the Rule

The final rule provides parallel chapters that separately address general application and scoping of the Section 508 Standards and the Section 255 Guidelines (Chapters 1 and 2). These sections apply to both 508-covered and 255-covered ICT functional performance criteria (Chapter 3), technical requirements for hardware and software (Chapters 4 and 5), criteria for support documentation and services (Chapter 6), and referenced standards (Chapter 7).

Coverage of Electronic Content (508 Standards)

Like the original 508 Standards, the updated 508 Standards apply to a federal agency's full range of public-facing content, including websites, documents and media, blog posts, and social media sites. The final rule also specifically lists the types of non-public-facing content that must comply. This includes electronic content used by a federal agency for official business to communicate:



emergency notifications, initial or final decisions adjudicating administrative claims or proceedings, internal or external program or policy announcements, notices of benefits, program eligibility, employment opportunities or personnel actions, formal acknowledgements or receipts, questionnaires or surveys, templates or forms, educational or training materials, and web-based intranets.

“Safe Harbor” for Legacy ICT

Existing ICT, including content, that meets the original 508 Standards does not have to be upgraded to meet the refreshed standards unless it is altered. This “safe harbor” clause (E202.2) applies to any component or portion of ICT that complies with the existing 508 Standards and is not altered. Any component or portion of existing, compliant ICT that is altered after the compliance date (January 18, 2018) must conform to the updated 508 Standards.

Functional Performance Criteria (Chapter 3)

The functional performance criteria are outcome-based provisions that address accessibility relevant to disabilities impacting vision, hearing, color perception, speech, cognition, manual dexterity, reach, and strength. These criteria apply only where a technical requirement is silent regarding one or more functions or when evaluation of an alternative design or technology is needed under equivalent facilitation. If a technical provision covers a particular function of hardware or software, meeting the relevant functional performance criterion is not required.

The functional performance criteria require that technologies with:

- visual modes also be usable with limited vision and without vision or color perception;
- audible modes also be usable with limited hearing and without hearing;
- speech-based modes for input, control, or operation also be usable without speech;
- manual operation modes also be usable with limited reach and strength and without fine motor control or simultaneous manual operations; and
- have features making its use simpler and easier for people with limited cognitive, language, and learning abilities.

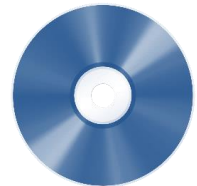


Technical Requirements for Hardware and Software (Chapters 4 and 5)

Requirements in Chapter 4 apply to hardware that transmits information or has a user interface. Examples include computers, information kiosks, and multi-function copy machines. These provisions address closed functionality, biometrics, privacy, operable parts, data connections, display screens, status indicators, color coding, audible signals, two-way voice communication, closed captioning, and audio description.



Software requirements in Chapter 5 apply to computerized code that directs the use and operation of ICT and instructs ICT to perform a given task or function, including applications and mobile apps, operating systems, and processes that transform or operate on information and data. These provisions cover the interoperability with assistive technology, applications, and authoring tools.



Support Documentation and Services (Chapter 6)

Access to support documentation and services for the use of ICT is also addressed. Product documentation must cover how to use the access and compatibility features required for hardware and software. Electronic documentation must comply with the requirements for electronic content. Alternate formats must be made available upon request for documentation provided in a non-electronic format. Support services, including help desks, call centers, training services, and automated technical support must accommodate the communication needs of customers with disabilities and include information on access and compatibility features.



Referenced Standards (Chapter 7)

In addition to WCAG 2.0, the final rule also references other voluntary consensus standards to address:

- ergonomics for the design of accessible software
(ANSI/HFES 200.2, *Human Factors Engineering of Software User Interfaces – Part 2: Accessibility*)
- interference to hearing aids by wireless telephones
(ANSI/IEEE C63.19-2011, *American National Standard for Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids*)
- handset generated audio band magnetic noise of wire line telephones
(TIA-1083-B, *Telecommunications—Communications Products—Handset Magnetic Measurement Procedures and Performance Requirements*)
- speech quality in digital transmissions
(ITU-T Recommendation G.722.2, *Series G. Transmission Systems and Media, Digital Systems and Networks or IETF RFC 6716, Definition of the Opus Codec*)
- audio description by digital television tuners
(A/53 *Digital Television Standard, Part 5: AC-3 Audio System Characteristics*)

- accessible PDF files
(ANSI/AIIM/ISO 14289-1-2016, *Document Management Applications — Electronic Document File Format Enhancement for Accessibility — Part 1: Use of ISO 32000-1 (PDF/UA-1)*)
- keypad arrangement
(1 ITU-T Recommendation E.161, *Series E. Overall Network Operation, Telephone Service, Service Operation and Human Factors*)

Effective Date and Next Steps

Federal agencies and contractors covered by Section 508 are not required to comply with the updated 508 Standards immediately.

The Rehabilitation Act gives the Federal Acquisition Regulatory Council (FAR Council) and federal agencies up to six months to incorporate the updated 508 Standards into their respective acquisition regulations and procurement policies and directives. It will be up to the FAR Council to establish the date by which new and existing procurements for 508-covered ICT must meet the updated 508 Standards. For all other non-procured ICT, federal agencies and contractors must comply with the updated 508 Standards beginning on January 18, 2018 (i.e., one year after publication of the final rule in the *Federal Register*). During the interim period before the updated 508 Standards take effect, the original 508 Standards continue to serve as the accessibility standard for all 508-covered ICT.



With respect to the updated Section 255 Guidelines, compliance is not required until the guidelines are adopted by the Federal Communications Commission (FCC), which is the federal agency tasked with implementation and enforcement of Section 255. The FCC's existing regulations under Section 255 specify accessibility requirements that largely track the Board's original Section 255 Guidelines. When the FCC initiates a rulemaking to revise its existing regulations, it has the discretion to adopt the Board's 255 Guidelines in whole or in part. Any FCC rulemaking, when completed, will specify the effective date for its updated accessibility requirements under Section 255.



Further Information

For further information on this rulemaking, visit the Board's website at www.access-board.gov, send a message to 508@access-board.gov, or contact Bruce Bailey at (202) 272-0024 (v), (202) 272-0070 (TTY) or Timothy Creagan at (202) 272-0016 (v), (202) 272-0074 (TTY).



UNITED STATES ACCESS BOARD
Advancing Full Access and Inclusion for All
 1331 F Street, NW ▪ Suite 1000 ▪ Washington, DC 20004-1111
 (202) 272-0080 (v) ▪ (202) 272-0082 (TTY) ▪ www.access-board.gov

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