



Consumer Technology Association, producer of CES®

Accessibility Resource Center

*A CTA Member's Primer on the
Federal Communications Commission's
Accessibility Rules*

Disclaimer: This document is not intended or offered as legal advice. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Moreover, the content of this document may not contain complete statements of the law. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

Table of Contents

About the ARC	1
Does Your Company Need to Comply with the FCC’s Accessibility Rules?	2
<i>Advanced Communications Services</i>	<i>2</i>
<i>Internet Browsers on Mobile Phones</i>	<i>3</i>
<i>Closed Captioning</i>	<i>3</i>
<i>User Interfaces</i>	<i>3</i>
List of CVAA-Related Accessibility Dockets, by Bureau	4
Background	6
<i>General Milestones.....</i>	<i>6</i>
<i>Proceedings on Advanced Communications Services and Accessibility of Internet Browsers on Mobile Phones</i>	<i>7</i>
<i>Proceedings on Closed Captioning of IP-Delivered Video Programming And Caption Quality</i>	<i>11</i>
<i>Proceedings on Emergency Information and Video Description</i>	<i>13</i>
<i>Proceedings on User Interfaces of Navigation Devices and Digital Apparatus</i>	<i>14</i>
Outstanding Issues Pending Resolution at the FCC.....	17
<i>Accessibility of ACS and Equipment Used for ACS [CG 10-213] including Real-Time Text [CG 16-145] and Video Conferencing [CG 23-161]</i>	<i>17</i>
<i>Closed Captioning of IP-Delivered Video Programming [MB 11-154] And Caption Quality [CG 05-231]</i>	<i>17</i>
<i>Emergency Information and Video Description [MB 12-107]</i>	<i>17</i>
<i>User Interfaces of Navigation Devices and Digital Apparatus [MB 12-108]</i>	<i>Error!</i>
<i>Bookmark not defined.</i>	

Attachments

- Master Compliance Date List (updated Dec. 2024)
- CTA ACS Compliance Manual (Mar. 2012, updated Dec. 2024)
- CTA Closed Captioning Compliance Manual (Dec. 2013, updated Dec. 2024)
- CTA User Interface Accessibility Compliance Manual (updated Dec. 2023)

About the ARC

CTA supports industry-driven solutions that bring innovative technologies and services to consumers with disabilities. The Accessibility Resource Center provides CTA members with a repository of information on accessibility requirements for consumer communications and video devices.

In 2010, Congress passed the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA” or “Act”). The CVAA requires certain device manufacturers, video programming owners and distributors, and service providers to implement technologies that can assist consumers with disabilities. The Act added several new sections to the Communications Act of 1934, amended others, and delegated to the Federal Communications Commission (“FCC” or “Commission”) the task of creating detailed rules.

CTA, known as the Consumer Electronics Association (CEA) prior to 2015, has been fully engaged at each step of the Commission’s rulemaking process to guard against overbroad regulation of devices and notifies members of important compliance milestones. We provide a detailed timeline of CVAA-related proceedings in the Background section, below.

Does Your Company Need to Comply with the FCC's Accessibility Rules?

Accessibility rules for consumer devices will affect many manufacturers. This quick guide should help you understand whether you are responsible for compliance with the FCC's accessibility rules.¹

ADVANCED COMMUNICATIONS SERVICES

Advanced Communications Services (ACS) are five categories of communication:

- Interconnected VoIP services
- Non-interconnected VoIP services
- Electronic messaging services
- Interoperable video conferencing services
- Any audio or video communications service used by inmates for the purpose of communicating with individuals outside the correctional institution where the inmate is held, regardless of technology used.²

Examples of ACS include text messaging, email, instant messaging, real-time text (RTT), and video calling/video chat.

Providers of ACS and manufacturers of equipment used for ACS are each responsible for complying with the FCC's ACS rules. The term "manufacturer" means an entity that makes or produces a product, including end user equipment, network equipment, and software. In addition, the FCC found that a service provider can be liable as a "co-manufacturer" if it stipulates product specifications, contracts to produce a product, or otherwise is extensively involved in the manufacturing process. The obligations of equipment manufacturers do not apply to standalone software providers. Please note that internet browsers that are installed or included by a manufacturer in a device and used for ACS fall under the Commission's ACS rules as well.

Please see the ACS Compliance Manual for further details.

¹ This short guide only discusses CVAA-orders that are directly applicable to manufacturers.

² The CVAA set forth the first four categories of advanced communications services. The fifth was added by the Martha Wright-Reed Just and Reasonable Communications Act of 2022, Pub. L. No. 117-338, 136 Stat. 6156 (2022). The FCC addressing this fifth category in a proceeding focused on Incarcerated People's Communications Services ("IPCS" and formally called "inmate calling services.") See *Incarcerated People's Communications Services; Implementation of the Martha Wright-Reed Act; Rates for Interstate Inmate Calling Services*, WC Dockets Nos. 23-62 and 12-375, Notice of Proposed Rulemaking and Order, FCC 23-19 (Mar. 17, 2023). This CTA Accessibility Resource Center does not cover proceedings or requirements related to IPCS.

INTERNET BROWSERS ON MOBILE PHONES

Manufacturers of mobile phones that include an internet browser are responsible for complying with the FCC's accessibility rules for mobile browsers. See 47 C.F.R. § 14.61.

CLOSED CAPTIONING

The CVAA required the Commission to expand the scope of its existing closed captioning rules to cover devices with small screens and video programming delivered by means of IP. Video programming distributors and owners—*i.e.*, content providers—bear responsibility for captioning content. However, manufacturers of end-user equipment designed to receive, play back, or record programming have an obligation to ensure those captions are accessible on the multitude of devices that are capable of displaying video, such as tablets and smartphones.

Please see the IP Captioning Compliance Manual for further details.

USER INTERFACES

The CVAA required the Commission to create rules intended to (1) enable consumers who are blind or visually impaired³ to more easily access video programming on a range of video devices, and (2) enable consumers who are deaf or hard of hearing to more easily activate closed captioning on video devices. The Commission adopted such rules on October 31, 2013, and further implementing rules on November 18, 2015, although some rules related to access to user display settings for closed captioning have yet to be finalized pending further rulemaking.

Please see the User Interface Accessibility Compliance Manual for further details.

³ This document uses the FCC's phrase "visually impaired" to describe individuals who are blind and low vision (CTA's usual phrasing).

List of CVAA-Related Accessibility Dockets, by Bureau

This is meant to serve as a reference to the broad list of FCC dockets that relate to accessibility. Although CTA⁴ may have filed comments in these dockets, CTA has not necessarily responded to all of the issues raised by the Commission in these proceedings.

- Media Bureau
 - MB 11-43: Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010
 - MB 11-154: Closed Captioning of IP-Delivered Video Programming
 - MB 12-107: Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description
 - MB 12-108: Accessibility of User Interfaces, Video Programming Guides and Menus
- Consumer and Governmental Affairs Bureau
 - CG 05-231: Closed Captioning of Video Programming; Petition
 - CG 10-145: Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision (Internet Browsers on Mobile Phones)
 - CG 10-213: Implementation of Sec. 716 and 717 of the Communications Act (Accessibility Requirements for ACS and Equipment Used for ACS, and General Accessibility Recordkeeping Requirements and Enforcement Procedures)
 - CG 11-175: Interpretation of Economically Burdensome Standard (Applies to Exemptions from the Closed Captioning Rules for Content Providers)
 - CG 16-145: Transition from TTY to Real-Time Text Technology
 - GN 21-240: Consumer and Governmental Affairs, Media, and Wireless Telecommunications Bureaus Seek Update on Commission's Fulfillment of the Twenty-First Century Communications and Video Accessibility Act
 - CG 23-161: Access to Video Conferencing (also combined with CG 03-123, Telecommunications Relay Services)
- Wireless Telecommunications Bureau

⁴Prior to November 2015, CTA filed FCC comments under "CEA". For clarity, we use "CTA" throughout this document.

- WT 96-198: Amendments to the Commission's Rules Implementing Section 255 and 251(a)(2) of the Communications Act (Accessibility Requirements for Telecommunications Services and Equipment Used for Telecommunications Services)

Background

The passage of the CVAA triggered a complex series of rulemakings at the FCC spanning from 2010 to the present. Some incorporate accessibility proceedings that pre-date the CVAA. The following timeline records milestones relevant to CTA members organized by topic. Since 2010, CTA has submitted dozens of filings to the Commission regarding CVAA implementation.

Please note that these dates are dates of adoption or action—they do not necessarily correspond with the effective dates for rule implementation or compliance.

GENERAL MILESTONES

- **October 8, 2010:** The CVAA is signed into law, triggering FCC rulemaking proceedings ([CVAA](#)).
- **October 23, 2012:** The FCC's Consumer Advisory Committee is [re-chartered](#) with CTA as a member. The Committee was established in November 2000 to make recommendations to the Commission on consumer issues within the jurisdiction of the FCC and to facilitate the participation of consumers (including people with disabilities and underserved populations, such as Native Americans and persons living in rural areas) in FCC proceedings.
- **July 23, 2013:** Marking the [23rd anniversary](#) of the passage of the landmark Americans with Disabilities Act, a diverse group of industry and accessibility advocates, including CTA, met with Secretary of State John Kerry to discuss their shared commitment to international disability rights and the ratification of the Convention on Rights of Persons with Disabilities (CRPD), or "The Disabilities Treaty."

Ratification would have ensured that the highest standard of disability rights, as upheld by the ADA, would be guaranteed to these Americans as soon as they travel overseas. In addition, the Disabilities Treaty sought to increase economic competition by fostering new international markets for American products and technologies developed specifically for the accessibility community.

- **October 9, 2013:** Continuing efforts that support international disability rights, CTA sent a [letter](#) to the offices of Chairman Robert Menendez and Ranking Member Bob Corker of the Senate Committee on Foreign Relations urging the swift ratification of the Disabilities Treaty. CRPD was first on the Senate floor for ratification in December 2012, but it failed by just five votes.
- **February 7, 2019:** Rachel Nemeth was [selected](#) to represent CTA and our members on the third term of the Disability Advisory Committee (DAC). The Committee was established in December 2014 to make recommendations to the Commission on disability access issues and to suggest ways to facilitate the

participation of consumers with disabilities in proceedings before the Commission. Rachel Nemeth [continues](#) to serve on the DAC, now in its fifth term.

PROCEEDINGS ON ADVANCED COMMUNICATIONS SERVICES AND ACCESSIBILITY OF INTERNET BROWSERS ON MOBILE PHONES

- **July 14, 1999:** The FCC implemented section 255 and 251(a)(2) of the Communications Act ([PDF](#)). This order adopted rules requiring that consumers with disabilities have access to telecommunications. It defined terms in section 255, codified regulatory requirements for telecommunications equipment manufacturers and service providers, and outlined the Commission's enforcement procedures. Later Commission actions, including those implementing the CVAA, built upon the framework laid out in this order. [WT 96-198]
- **May 31, 2007:** The FCC extended the disability access requirements of section 255 of the Communications Act to interconnected VoIP providers and manufacturers of specially designed equipment used to provide interconnected VoIP services ([PDF](#)). [WT 96-198]
- **October 7, 2011:** The FCC implemented ([PDF](#)) sections 716 and 717 of the Communications Act, added by the CVAA, in its "ACS Report & Order." In this comprehensive rulemaking, the Commission concluded that accessibility requirements of the CVAA apply to non-interconnected VoIP services, electronic messaging services, and interoperable video conferencing services, as well as equipment used for these services. The Commission also defined what entities must comply with the ACS rules, what services and equipment are exempt from the rules, how "achievability" is defined and evaluated, and the standard applied to waiver requests. [CG 10-145/10-213/WT 96-198]
 - o CTA filed comments ([PDF](#)) and replies ([PDF](#)) on the FCC's proposed rules implementing sections 716, 717, and 718 of the Communications Act, which establish (i) accessibility requirements for ACS and equipment used for ACS, (ii) general recordkeeping requirements and enforcement procedures, and (iii) accessibility requirements for internet browsers on mobile phones, respectively. CTA urged the FCC to constrain its rulemaking to the scope of the CVAA in order to preserve maximum flexibility for manufacturers to innovate accessible technologies. CTA also argued that manufacturers must be given sufficient time to phase-in the accessibility requirements and achieve compliance with the FCC's rules. The FCC agreed with many of CTA's essential arguments, including key definitions for terms such as "interconnected VoIP," "accessible," "usable," as well as phase-in schedules to ease the compliance burden on manufacturers.
 - o In an accompanying Further Notice of Proposed Rulemaking (FNRPM), the FCC asked for input on some issues, including the duration of the

exemption for small entities, how to define “interoperable video conferencing,” and how to implement the requirements in section 718 regarding the accessibility of internet browsers on mobile phones. CTA argued in comments ([PDF](#)) and replies ([PDF](#)) that small entities should be permanently exempted from the ACS rules, that the FCC should not impose broad accessibility requirements on all internet browsers, and that the FCC must adhere to the constraints of the CVAA for other types of communications services, such as interoperable video conferencing.

- **October 15, 2012:** The FCC addressed petitions filed by CTA ([PDF](#)), the National Cable & Telecommunications Association, and the Entertainment Software Association for class waivers of the Commission’s ACS rules, which were filed in response to the ACS R&O adopted on October 7, 2011 ([PDF](#)). Each petition requested an extension of the deadlines set by the FCC’s ACS R&O for the following device types: IP-enabled television sets and IP-enabled digital video players; set-top boxes leased by cable operators to their customers; and three classes of gaming devices and services. The Commission granted all three extension requests, with a common expiration date of October 8, 2015. [CG 10-213]
- **April 26, 2013:** The FCC took further action with respect to section 718 of the Communications Act of 1934 to require mobile phone manufacturers and mobile service providers that include or arrange for the inclusion of an internet browser on mobile phones to ensure that the browser’s functions are accessible to people who are blind or have a visual impairment ([PDF](#)). [CG 10-145/10-213/WT 96-198]
- **October 22, 2013:** The FCC addressed a petition from the Coalition of E-Reader Manufacturers requesting a class waiver for e-reader devices ([PDF](#)). The FCC granted temporary relief from the ACS rules until January 28, 2014. CTA filed comments in support of the petition. [CG 10-213]
- **January 28, 2014:** The FCC took further action on the e-reader petition, granting an extension of the temporary class waiver for those devices until January 28, 2015 ([PDF](#)). [CG 10-213]
- **September 16, 2015:** The FCC addressed a petition by the Entertainment Software Association (ESA). The FCC granted a partial extension of the class waiver for video game software. Originally, the class waiver was set to expire October 8, 2015. ([PDF](#)) [CG 10-213]
- **February 1, 2016:** The FCC granted an indefinite extension of the waiver from the Commission’s ACS rules to a class of e-readers whose primary purpose is reading text-based digital works. CTA had filed comments in support of the petition. ([PDF](#)) [CG 10-213]
- **December 15, 2016:** In response to a petition for rulemaking, the FCC permitted handset manufacturers to support RTT, a type of ACS, in lieu of their TTY

technology obligations under the telecommunications and ACS accessibility rules. ([PDF](#)) [CG 16-145]

- **December 26, 2017:** The FCC granted an extension of the class waiver for video game software in response to an ESA petition. The class waiver, which had been extended twice, was set to expire December 31, 2017. It was extended until December 31, 2018, and was conditioned on ESA's submission of a mid-year progress report. ([PDF](#)) [CG 10-213]
- **October 9, 2018:** The FCC submitted its third biennial report to Congress regarding the implementation of Sections 255, 716, and 718 of the Communications Act. The report found continued improvements in the accessibility and usability of many covered products and services since previous reports, but also some that some accessibility gaps persist. ([PDF](#)) [CG 10-213]
- **October 7, 2020:** The FCC submitted its fourth biennial report to Congress regarding implementation of Sections 255, 716, and 718 of the Communications Act. The report found significant improvements in the accessibility of telecommunications services and equipment, but also acknowledged some accessibility gaps persist. ([PDF](#)) [CG 10-213]
 - In its comments, the CTA argued ([PDF](#)) that the Commission's flexible rules are working to deliver innovative technologies that are accessible to individuals with disabilities. CTA urged the FCC to conclude in its report that continued improvements in the accessibility and usability of many covered products and services have been made since the previous CVAA Biennial Report.
- **October 11, 2022:** The FCC submitted its fifth biennial report to Congress regarding implementation of Sections 255, 716, and 718 of the Communications Act. The report found significant progress in access to telecommunication services and equipment, but also noted accessibility gaps persist. ([PDF](#)) [CG 10-213]
 - In its comments, the CTA explained ([PDF](#)) that continuing innovation within the consumer technology sector is meeting the objectives of the CVAA and enabling CTA's members to comply with both the statute and the FCC's rules. The FCC's flexible regulatory approach encourages the industry to improve accessibility features in consumer products and adapt them to evolving consumer demands. The CTA urged Congress and the FCC to take steps to advance next-generation networks by continuing efforts to streamline infrastructure siting, increase the amount of spectrum available for flexible use and support the availability of telehealth offerings.
- **April 27, 2022:** The FCC released an Interoperable Video Conferencing Services Refresh Public Notice inviting comments on the coverage of rules to enable people with disabilities to access and use interoperable video conferencing services (IVCS). ([PDF](#)) [CG 10-213]

- o In its comments, the CTA argued ([PDF](#)) the FCC must give meaning to the word “interoperable” in the statute, applying the requirements of the CVAA to only those video conferencing services that are genuinely interoperable. The CTA argued such interpretation will provide clarity for companies while meeting the expectations of consumers and promote accessibility for people with disabilities. In its reply comments, the CTA argued ([PDF](#)) the Commission was correct in 2011 that “interoperable” needed to be given meaning when setting the scope of IVCS, and that the modifier did not grant the Commission the authority to mandate interoperability among providers or services. The CTA also argued any action requiring new IVCS-specific performance requirements must first be presented in a Notice of Proposed Rulemaking.
- **June 12, 2023:** The FCC released a Report and Order (R&O), Notice of Proposed Rulemaking (NPRM), and Order to take steps to ensure that video conferencing is accessible to all. In the R&O, the FCC concluded that Section 716’s accessibility requirements and Part 14 of its rules apply to all services and equipment included in the statutory definition of IVCS, that is, all services and equipment that “provid[e] real-time video communications, including audio, to enable users to share information of the user’s choosing.” ([PDF](#)) [CG 23-161, 10-213, 03-123]
 - o In the accompanying NPRM, the FCC proposed additional steps to make video conferencing accessible, including adding new IVCS-specific ACS performance objectives and amending the telecommunications relay services (TRS) rules to facilitate the use of video relay service (VRS) in video conferences. In its comments ([PDF](#)) and replies ([PDF](#)), CTA argued that the NPRM raises many important preliminary questions that require more stakeholder engagement and dialogue and it is premature for the Commission to issue new regulations. To that end, CTA argued a Further Notice of Proposed Rulemaking—at least with respect to requirements for video conferencing providers—would be appropriate. CTA further maintained the compliance date should be at least three years away, and that the FCC’s proposed rules should be consistent with precedent regarding achievability, waiver, and third-party solutions. Additionally, CTA argued the FCC must adhere to Congress’s directives and refrain from imposing any technical mandates.
- **September 27, 2024:** The FCC released a Second Report and Order (2R&O) and Further Notice of Proposed Rulemaking (FNPRM) to provide additional clarity on how existing accessibility performance objectives in Part 14 of the FCC’s rules apply to IVCS. The FCC also modified and imposed additional performance objectives to ensure access to IVCS. The 2R&O also modified the FCC’s rules for TRS to address how the Interstate TRS Fund will support the provision of VRS and other forms of TRS in video conferences. ([PDF](#)) [CG 23-161, 10-213, 03-123]

- o In the accompanying FNPRM, among other things, the FCC proposed adopting additional amendments to further ensure the accessibility of video conferencing, including potential amendments to the Part 14 rules that would provide additional specificity on user control of IVCS accessibility features and address IVCS accessibility for individuals with vision, cognitive, and mobility disabilities. As of this update, the FCC has not yet set the comment deadlines for the FNPRM. CTA plans to comment on the FNPRM once comment dates are announced.

PROCEEDINGS ON CLOSED CAPTIONING OF IP-DELIVERED VIDEO PROGRAMMING AND CAPTION QUALITY

- **January 12, 2012:** The FCC, in its “IP Captioning Order,” implemented the closed captioning provisions of sections 202 and 203 of the CVAA by adopting closed captioning requirements for the owners, providers, and distributors of video programming delivered using IP, and for manufacturers of apparatus designed to receive, play back, or record video programming ([PDF](#)). Among other things, the Commission established what apparatus are covered by section 203 (physical devices and integrated video players—including removable media players—and recording devices) and the capabilities that covered apparatus must have to achieve compliance with that section. [MB 11-154]
 - o In its comments, CTA argued ([PDF](#)) that the Commission should adopt flexible rules to promote innovation, including minimum technical captioning requirements to ensure a functionally equivalent captioning experience, if achievable, and a uniform captioning format standard so that manufacturers would not have to support every possible format. CTA also argued that many types of apparatus should be exempt from the captioning requirements.
 - o Among other things, the FCC agreed to adopt CTA’s recommendation to establish a safe-harbor captioning format and agreed that the “achievability” standard in the context of captioning should be the same as that used for Advanced Communications Services to establish consistency for manufacturers.
- **August 17, 2012:** The FCC addressed two petitions for temporary partial exemption or limited waiver of certain provisions of the IP captioning rules, which were filed by the Digital Media Association (DiMA) in response to the Commission’s January 12, 2012 IP Captioning Order ([PDF](#)). In one petition, DiMA requested an exemption or waiver until January 1, 2014 from the Commission’s rules that require applications, plug-ins, or devices provided by video programming distributors and providers (VPDs) to comply with the user configuration and formatting requirements of the Rules. In the other petition, DiMA requested an exemption or waiver until January 1, 2014 from the Commission’s rules. The requested exemption related to the rendering of

captions for VPDs that do not currently provide closed captioning. The first waiver was granted, the second denied. [MB 11-154]

- **June 13, 2013:** The FCC addressed petitions for reconsideration of the IP Captioning Order, which were filed by CTA, TVGuardian, and various Consumer Groups representing the disabled community ([PDF](#)).
 - **CTA's Petition** ([PDF](#)) – In response to CTA, the Commission granted class waivers for certain apparatus that are primarily designed for activities other than receiving or playing back video programming, extended the compliance deadlines for Blu-ray players and DVD players that do not currently render or pass through captions (pending resolution of an accompanying FNPRM), and clarified that the January 1, 2014 compliance deadline for apparatus refers only to the date of manufacture, not the date of importation, shipment, or sale of apparatus manufactured before that date.
 - **TVGuardian's Petition** – The Commission denied TVGuardian's petition to require VPDs and digital source devices to pass through closed captioning data to consumer equipment. CTA opposed TVGuardian's petition.
 - **Consumer Groups' Petition** – This petition asked the Commission to apply the IP closed captioning rules to "video clips", and to reconsider its decision to not impose synchronization requirements on device manufacturers. The Commission stated that it did not have enough information to decide these issues, and teed them up for a later rulemaking. [MB 11-154]
- **November 4, 2013:** CTA filed comments ([PDF](#)) and replies ([PDF](#)) in response to the FCC's FNPRM ([PDF](#)) in its IP Captioning proceeding. CTA argued that the FCC should not impose synchronization requirements on apparatus, and that the FCC should not impose additional requirements on removable media players. [MB 11-154]
- **December 13, 2013:** The FCC sought comment on the application of IP closed captioning rules to video clips, as opposed to full length video programming ([PDF](#)). [MB 11-154]
- **February 24, 2014:** The FCC adopted caption quality standards and technical compliance rules seeking to ensure that video programming is fully accessible to individuals who are deaf and hard of hearing through the provision of closed captioning. It also clarified certain existing closed captioning requirements. The FCC sought comments in an FNPRM on, among other things, technical issues regarding the closed-caption capabilities of digital television (DTV) receivers ([PDF](#)). [CG 05-231]

- **July 9, 2014:** CTA filed comments ([PDF](#)) in response to the FCC's FNPRM in its caption quality proceeding stating that (i) the caption obstructions cited in the FNPRM appear to be caused by overlays in the video stream, not by devices, (ii) industry already has moved to ensure that closed captions can be displayed legibly on 3D-capable television sets, and (iii) television viewers will continue to have access to closed-captioned programming on Ultra HD television sets. [CG 05-231]
- **July 14, 2014:** The FCC revised its closed captioning requirements for the owners, providers, and distributors of video programming using IP to require the provision of closed captioning on certain IP video clips ([PDF](#)). [MB 11-154]
- **February 19, 2016:** The FCC allocated responsibility among video programming distributors and video programmers with respect to the provision and quality of closed captions on television programming as well as corresponding complaint procedures ([PDF](#)). [CG 05-231]

PROCEEDINGS ON EMERGENCY INFORMATION AND VIDEO DESCRIPTION

- **April 8, 2013:** The FCC adopted rules requiring that emergency information provided in video programming be made accessible to individuals who are blind or visually impaired, and that certain apparatus designed to receive, play back, or record video programming decode and make available the secondary audio stream for the delivery video description and aural emergency information ([PDF](#)). [MB 12-107/11-43]
 - CTA filed comments ([PDF](#)) in response to the FNPRM. CTA argued that the FCC should not extend the apparatus emergency information and video description rules to laptops, PCs, smartphones, or similar devices through which consumers access linear video programming via IP or other nontraditional means, or to third-party software that manufacturers do not control. CTA also urged the FCC to refrain from requiring the use of a particular tag in the video description stream and from regulating customer support services provided by covered entities. [MB 12-107]
- **January 16, 2014:** CTA filed a written ex parte letter ([PDF](#)) urging the FCC to refrain from subjecting mobile and other devices that receive linear programming via IP to the emergency information and video description apparatus rules. [MB 12-107]
- **May 21, 2015:** The FCC extended the rules regarding accessible emergency information in video programming to linear programming provided by MVPDs, over their networks, accessed through laptops, mobile devices, game consoles, and other similar devices. The FCC cautioned that it may impose manufacturer obligations in the future if devices are impeding the ability of a user to hear the secondary audio stream. ([PDF](#)) [MB 12-107]

- **May 25, 2018:** The FCC granted a permanent waiver for analog-only cable systems that lack the equipment needed to pass through audible emergency information via a secondary audio stream of the requirement that emergency information provided visually during non-newscast video programming be made audibly accessible to individuals who are blind or visually impaired through the use of a secondary audio stream. The FCC also extended an existing waiver granted to television broadcasters of the requirement to aurally describe visual but non-textual emergency information, such as maps or other graphic displays, for an additional five years.⁵ ([PDF](#)) [MB 12-107]

PROCEEDINGS ON USER INTERFACES OF NAVIGATION DEVICES AND DIGITAL APPARATUS

- **October 29, 2013:** The FCC, in its “User Interface Accessibility Order,” implemented sections 204 and 205 of the CVAA by adopting rules requiring the accessibility of user interfaces on video-capable devices. ([PDF](#)) The FCC’s user interface accessibility rules are intended to (1) enable consumers who are blind or visually impaired to more easily access video programming on a range of video devices and (2) enable consumers who are deaf or hard of hearing to more easily activate closed captioning on video devices. [MB 12-108]
 - o CTA filed comments ([PDF](#)) in response to the FCC’s October 29, 2013 FNPRM. CTA argued that:
 - The FCC should apply its existing definition of “usable” to “appropriate” built-in apparatus functions;
 - The FCC should not impose additional information, documentation, and training requirements on digital apparatus and navigation devices;
 - The CVAA does not authorize the FCC to impose broad requirements on user controls for closed caption display settings;
 - The FCC should not mandate the means for accessing the secondary audio stream for emergency information on apparatus covered by Section 203 of the CVAA;
 - A website consumer notification requirement for navigation device manufacturers could be reasonable, but a labeling requirement for any device is not. [MB 12-108]

⁵ This waiver has been repeatedly extended, most recently on December 20, 2024, which extended the waiver through May 27, 2025, or until there is a ruling on a separate National Association of Broadcasters petition for rulemaking and waiver extension on the requirement, whichever is sooner. ([PDF](#))

- **January 20, 2014:** Accessibility Groups filed a Petition for Reconsideration, requesting that the Commission revisit its determination that voice and gesture commands satisfy the CVAA's standard for mechanisms used to activate closed captioning on video devices. ([PDF](#))
 - CTA filed an Opposition ([PDF](#)), arguing that the Commission correctly determined that voice and gesture commands comply with the language of the CVAA. [MB 12-108]
- **May 21, 2015:** The FCC adopted rules requiring certain apparatus designed to receive, play back, or record video to include a simple activation mechanism to access the audible emergency information on the secondary audio stream. ([PDF](#)) [MB 12-107]
- **November 18, 2015:** The FCC adopted rules that (1) applied the Commission's existing definition of "usable" to Section 204 apparatus, (2) adopted consumer notification requirements for equipment manufacturers of digital apparatus and navigation devices that will require manufacturers to publicize the availability of accessible devices on manufacturer websites, and (3) declined to adopt a requirement that MVPDs include more detailed program information for public, educational, and governmental channels in their video programming guides. In the same document, the FCC decided on reconsideration that voice control cannot be the *sole* means of activation for closed captioning. However, gesture controls alone would meet the "reasonably comparable to a button, key, or icon" requirement. In a further notice of proposed rulemaking, the Commission sought comment on proposed rules that would require manufacturers and MVPDs to ensure that consumers are able to readily access user display settings for closed captions. ([PDF](#)) [MB 12-108]
 - CTA filed comments ([PDF](#)) to the Commission's proposed user interface rules, arguing that the Television Decoder Circuitry Act does not give the Commission the authority to adopt additional requirements for accessing user interface controls for closed captions. Even if it did, CTA argued that the FCC should wait to evaluate companies' compliance with the existing user interface rules, which take effect in December 2016. [MB 12-108]
- **January 10, 2022:** The FCC released a Public Notice seeking to refresh the record on closed captioning display settings. ([PDF](#)) [MB 12-108]
 - CTA filed comments ([PDF](#)) and replies ([PDF](#)) that explained that the FCC should not adopt additional closed captioning rules related to display settings because, among other things, the Commission does not have the authority to do so. In addition, CTA maintained that a detailed, onerous proposal from certain advocacy groups required additional public comment.

- o In response to CTA's filing, the FCC issued a Public Notice, on **January 24, 2023** ([PDF](#)), seeking comment on the onerous proposal. CTA filed comments ([PDF](#)) and organized a joint association reply ([PDF](#)) explaining that industry is already providing ready access to closed captioning display settings and that the FCC should not adopt the advocacy groups' proposal.
- **March 19, 2024:** The FCC released a Public Notice seeking comment on a joint proposal supported by NCTA – The Internet & Television Association (NCTA), Communication Service for the Deaf, the Hearing Loss Association of America, the National Association of the Deaf, and TDIforAccess, Inc. for a framework that the FCC would use to evaluate whether closed captioning display settings are readily accessible to individuals who are deaf and hard of hearing. ([PDF](#)) [MB 12-108]
 - o CTA filed comments observing that CTA's members have strong incentives to develop new technologies and standards related to user interfaces and accessibility to stay competitive in a fast-changing market. CTA also expressed concerns about open issues and the applicability of the joint proposal to CTA's manufacturer members. ([PDF](#))
- **July 18, 2024:** The FCC adopted rules – largely consistent with the joint proposal, but with certain modifications – requiring manufacturers of covered apparatus and MVPDs to make closed captioning display settings readily accessible to individuals who are deaf and hard of hearing. ([PDF](#)) [MB 12-108]
 - o The FCC amended its original draft rules to incorporate changes CTA requested in *ex parte* meetings. ([PDF](#), [PDF2](#), [PDF3](#))

Outstanding Issues Pending Resolution at the FCC

The FCC's actions in late 2013 and early 2014 largely concluded the accessibility rulemakings triggered by the CVAA. All of the Act's core elements—access to ACS and equipment used for ACS, IP closed captioning, access to emergency information and video description, and access to user interfaces on digital apparatus and video programming guides and menus provided by navigation devices—have been implemented. However, the FCC has requested further input on some issues. CTA remains committed to following through with these issues and maintaining our relationships with accessibility groups. CTA has commented, and awaits a decision, on several outstanding issues.

ACCESSIBILITY OF ACS AND EQUIPMENT USED FOR ACS [CG 10-213] INCLUDING REAL-TIME TEXT [CG 16-145] AND VIDEO CONFERENCING [CG 23-161]

- Impose additional specific performance requirements on interoperable video conferencing services. [CG 10-213; CG 23-161]
- Whether the accessibility requirements for ACS and equipment used for ACS should apply to video mail, record, and play back features of video conferencing services and related equipment. [CG 10-213]
- A timeline to sunset the RTT requirement to be backward compatible with TTY [CG 16-145].

CLOSED CAPTIONING OF IP-DELIVERED VIDEO PROGRAMMING [MB 11-154] AND CAPTION QUALITY [CG 05-231]

- Whether apparatus should be required to synchronize closed captions. [MB 11-154]
- Whether Blu-ray players and DVD players that cannot render or pass through closed captions should be made to render closed captions. [MB 11-154]
- Whether further regulatory action is needed regarding closed captions that are partially or completely blocked by other visual information, such as graphics, that appear on the screen. [CG 05-231]
- Whether further actions should be taken regarding the display of closed captioning on 3D and Ultra HD television sets. [CG 05-231]

EMERGENCY INFORMATION AND VIDEO DESCRIPTION [MB 12-107]

- Whether video description stream should include a particular tag to indicate “visually impaired” or VI.

- Whether companies should have to provide specialized customer support to help consumers navigate between the main and secondary audio streams.

Contacts

David Grossman

Vice President, Policy & Regulatory Affairs

dgrossman@cta.tech

Rachel Nemeth

Senior Director, Regulatory Affairs

rnemeth@cta.tech

Charts of Significant Dates

SIGNIFICANT FCC ACCESSIBILITY DATES FOR EQUIPMENT PROVIDERS ⁶	
DATE	ACCESSIBILITY REQUIREMENT
April 1, 2013	Deadline for filing first annual certification of compliance with the accessibility recordkeeping requirements regarding telecommunications services and equipment, advanced communications services and equipment, and mobile browsers (the “accessibility recordkeeping requirements”) Deadline for filing contact information for the person (or persons) within the company who is authorized to resolve accessibility complaints and designating an agent for service; information must be updated within 30 days of any material change
October 8, 2013	Compliance date for accessibility rules governing advanced communications services and equipment (the “ACS rules”) ⁷ and the mobile browser accessibility rules; consumers may begin filing complaints alleging violations of these rules
January 1, 2014	Compliance date for closed captioning requirements for covered equipment (the “apparatus closed captioning rules”) ⁸
April 1, 2014 (and annually thereafter)	Deadline for filing annual certification of compliance with the accessibility recordkeeping requirements
TBD	Temporary waiver now in effect for closed captioning requirements for DVD players that do not already render or pass through closed captions and Blu-ray players; end date of waiver to be determined if and when the FCC provides further instructions
May 26, 2015	Compliance date for video description and emergency information accessibility requirements for covered equipment

⁶ This chart only covers dates that apply to entities that manufacture equipment or provide equipment to consumers. Equipment manufacturers and providers that distribute or own video programming may also be subject additional deadlines, as indicated in the second chart below, consistent with the FCC’s accessibility rules for video programming distributors and owners.

⁷ The FCC temporarily waived this deadline for IPTVs, IP-enabled digital video players (IP-DVPs), set-top boxes leased by cable operators to their customers, game consoles (including their peripherals and integrated online networks), game distribution and online game play services that distribute game software or enable online game play across a network, and game software used for game play.

⁸ The FCC temporarily waived this deadline for DVD players that do not render or pass through closed captions and Blu-ray players, pending further instructions from the Commission.

October 8, 2015	Last day of temporary waivers of ACS rules for IPTVs, IP-DVPs, cable operator-leased set-top boxes, game consoles and game distribution services
December 20, 2016	Compliance date for accessibility rules for user interfaces on digital apparatus and video programming guides and menus provided by navigation devices (the “user interface accessibility rules”) and simple and easy to use accessible emergency information and video description apparatus rules
December 20, 2018	Compliance date for manufacturers that opt to provide real-time text in covered devices, subject to the readily achievable or achievable limitations in Parts 6, 7 or 14, as applicable
December 31, 2018	Last day of temporary waiver of ACS rules for game software used for game play
December 20, 2021	Compliance date for user interface accessibility rules as applied to display-only monitors, video projectors, and digital cameras and similar equipment
September 3, 2024	Compliance date for video conferencing services to comply with the ACS rules
October 3, 2024	Initial due date for IVCS manufacturers and providers to submit accessibility contact information and certifications of compliance with the ACS recordkeeping requirements (to the extent they have not filed in the database previously)
August 17, 2026	Likely ⁹ compliance date for closed captioning display settings rules
January 12, 2027	Compliance date for video conferencing services to comply with revised ACS rules adopted in the IVCS Second Report and Order

⁹ The exact compliance date will be after the Office of Management and Budget (OMB) has completed its review of any information collection requirements that the Media Bureau determines is required under the Paperwork Reduction Act or August 17, 2026, whichever is later. It is a near certainty that OMB review will conclude prior to August 17, 2026.

SIGNIFICANT FCC ACCESSIBILITY DATES FOR VIDEO PROGRAMMING DISTRIBUTORS, PROVIDERS, AND OWNERS (VPDs, VPPs, and VPOs) ¹⁰	
DATE	ACCESSIBILITY REQUIREMENT
September 30, 2012	<p>Compliance date for closed captioning of prerecorded programming that is delivered using IP but not edited for Internet distribution and that is shown on television with captions on or after this date</p> <p>New and upgraded apps and plug-ins provided to consumers to deliver video programming must render or pass through basic closed captions if deployed by VPDs on or after this date; however, VPDs do not yet have to implement the configuration and formatting capabilities required by the rules due to a temporary waiver expiring January 1, 2014</p> <p>Deadline for VPDs and VPOs to have procedures in place to identify all IP-delivered programming that is required to be captioned and for VPDs to make up-to-date contact information available to end users for the receipt and handling of written closed captioning complaints</p>
March 30, 2013	<p>Compliance date for closed captioning of live and near-live programming that is delivered using IP and that is shown on television with captions on or after this date</p>
September 30, 2013	<p>Compliance date for closed captioning of prerecorded programming that is delivered using IP and edited for Internet distribution and that is shown on television with captions on or after this date</p>
January 1, 2014	<p>New and upgraded apps and plug-ins provided to consumers to deliver video programming must render or pass through captions with the required user configuration and formatting capabilities if deployed by VPDs on or after this date</p>
Archival Programming	<p>No captioning is required for uncaptioned, archival IP-delivered programming already in a VPD's library, even if aired on TV with captions, provided that air date is prior to <u>March 30, 2014</u></p>

¹⁰ This chart only covers dates that apply to entities that distribute, provide, or own video programming delivered via Internet protocol. Entities that distribute programming via means other than Internet protocol, such as broadcast stations and multichannel video programming distributors, may also be subject to additional deadlines, consistent with the FCC's video description rules and accessibility rules for emergency information provided during video programming.

March 30, 2014	For archival programming aired on TV with captions on or after <u>March 30, 2014</u> but before <u>March 30, 2015</u> , a VPD must update its files to make captions available within 45 days of the date on which the programming was aired
March 30, 2015	For archival programming aired on TV with captions on or after <u>March 30, 2015</u> but before <u>March 30, 2016</u> , a VPD must update its files to make captions available within 30 days of the date on which the programming was aired
January 1, 2016	Compliance date for captioning of video clips of a single excerpt of a captioned TV program with the same video and audio that was shown on TV on or after this date
May 26, 2016	Compliance date for VPDs and VPPs to make emergency information accessible
March 30, 2016	For programming aired on TV with captions on or after <u>March 30, 2016</u> , a VPD must update its files to make captions available within 15 days of the date on which the programming was aired
December 20, 2016	Larger MVPDs must provide accessible navigation devices to subscribers upon request
January 1, 2017	Compliance date for captioning of single online files containing multiple video clips taken from different parts of at least one captioned full-length TV program
July 1, 2017	Compliance date for captioning video clips of live and near-live TV programming, such as news or sporting events
July 10, 2017	MVPDs must provide a simple and easy to use method of accessing accessible emergency information stream for apps and plug-ins
December 20, 2018	Small MVPDs must provide accessible navigation devices to subscribers upon request



Consumer Technology Association, producer of CES®

Advanced Communications Services Compliance Manual

Updated December 2024

Disclaimer: This manual is not intended or offered as legal advice. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Moreover, the content of this manual may not contain complete statements of the law. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

Table of Contents

I. Definitions	1
II. Introduction and Background	3
III. Effective Dates and Phase-In	6
A. <i>ACS Accessibility and Usability Rules</i>	<i>6</i>
B. <i>Recordkeeping and Certification Requirements</i>	<i>6</i>
C. <i>Full Compliance and Complaints</i>	<i>6</i>
IV. What Products Do the ACS Rules Cover?	7
A. <i>Services</i>	<i>7</i>
1. <i>Interconnected VoIP Services</i>	<i>7</i>
2. <i>Non-Interconnected VoIP Services</i>	<i>8</i>
3. <i>Electronic Messaging Services</i>	<i>8</i>
4. <i>Interoperable Video Conferencing Services</i>	<i>8</i>
B. <i>Equipment</i>	<i>9</i>
V. What Companies Do the ACS Rules Cover?	9
A. <i>Providers of ACS</i>	<i>9</i>
B. <i>Manufacturers of Equipment Used for ACS</i>	<i>10</i>
C. <i>Limitations on Liability</i>	<i>10</i>
VI. If a Product or Entity is Covered, How Does It Comply?	10
A. <i>The Basics</i>	<i>10</i>
B. <i>Performance Objectives</i>	<i>11</i>
1. <i>What Does “Accessible” Mean?</i>	<i>11</i>
2. <i>What Does “Usable” Mean?</i>	<i>14</i>
C. <i>Product Design, Development, and Evaluation</i>	<i>14</i>
D. <i>Industry Flexibility: Built-in or Third-Party Solutions?</i>	<i>14</i>
E. <i>Compatibility</i>	<i>15</i>
F. <i>No Safe Harbors</i>	<i>16</i>
G. <i>Other Obligations</i>	<i>16</i>
1. <i>Network Features</i>	<i>17</i>
2. <i>Accessibility of Information Content</i>	<i>17</i>
3. <i>Information Pass-Through</i>	<i>17</i>
4. <i>Product Information, Documentation, Training, and Customer Support</i>	<i>18</i>
VII. Applying the “Unless Not Achievable” Test – The Four Factors	18

A. <i>Nature and Cost of the Product</i>	18
B. <i>Technical and Economic Impact on the Covered Entity</i>	19
C. <i>Type of Operations</i>	20
D. <i>Extent of Accessible Offering</i>	20
VIII. Exemptions and Waivers	20
A. <i>Exemptions</i>	20
1. Customized Equipment or Services	20
2. Temporary Exemption for Small Entities	21
B. <i>Implied Exemption: Beta Testing</i>	21
C. <i>Waivers</i>	21
IX. Recordkeeping and Certification	23
A. <i>Recordkeeping Requirements</i>	23
B. <i>Annual Certification</i>	24
C. <i>Production of Records; Confidentiality</i>	25
X. Consumer Complaints and FCC Proceedings (FCC Enforcement Process) ..	25
A. <i>CGB Dispute Assistance Process</i>	26
B. <i>Informal Complaint Process</i>	26
1. Informal Complaint Requirements.....	26
2. Answer Requirements.....	27
3. Reply Requirements	28
C. <i>Formal Complaint Process</i>	28
D. <i>Independent FCC Investigation</i>	28
E. <i>Remedies and Forfeitures</i>	28
XI. Accessible Mobile Browsers	29
XII. Conclusion	31
<u>Appendix A: The ACS Rules - Effective Dates and Phase-In Periods</u>	32
<u>Appendix B: ACS Compliance Flowchart</u>	33

I. Definitions

The term *accessible* is defined in Section VI.B.1.

The term *achievable* means with reasonable effort or expense, as determined by the FCC. In making such a determination, the FCC shall consider: (i) the nature and cost of the steps needed to meet the requirements of Section 716 of the Communications Act of 1934 and the FCC's ACS Rules with respect to the specific equipment or service in question; (ii) the technical and economic impact on the operation of the manufacturer or provider and on the operation of the specific equipment or service in question, including on the development and deployment of new communications technologies; (iii) the type of operations of the manufacturer or provider; and (iv) the extent to which the service provider or manufacturer in question offers accessible services or equipment containing varying degrees of functionality and features, and offered at differing price points.

The term *advanced communications services (ACS)* means: (1) interconnected VoIP service; (2) non-interconnected VoIP service; (3) electronic messaging service; (4) interoperable video conferencing service; and (5) any audio or video communications service for the purpose of communicating with individuals outside the correctional institution where the inmate is held, regardless of technology used.

The term *application* means software designed to perform or to help the user perform a specific task or specific tasks, such as communicating by voice, electronic text messaging, or video conferencing.

The term *compatible* is defined in Section VI.E.

The term *customer premises equipment (CPE)* means equipment employed on the premises of a person (other than a carrier) to originate, route, or terminate telecommunications. CPE is interpreted broadly and includes wireless devices such as cellular telephone handsets.

The term *customized equipment or services* means equipment and services that are produced or provided to meet unique specifications requested by a business or enterprise customer and not otherwise available to the general public, including public safety networks and devices.

The term *disability* means a physical or mental impairment that substantially limits one or more of the major life activities of an individual; a record of such an impairment; or being regarded as having such an impairment.

The term *electronic messaging service* means a service that provides real-time or near real-time non-voice messages in text form between individuals over communications networks.

The term *end user equipment* means equipment designed for consumer use. Such equipment may include both hardware and software components.

The term *FCC* means the Federal Communications Commission.

The term *hardware* means a tangible communications device, equipment, or physical component of communications technology, including peripheral devices, such as a smart phone, a laptop computer, a desktop computer, a screen, a keyboard, a speaker, or an amplifier.

The term *interconnected VoIP service* is a service that: (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet protocol-compatible CPE; and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.

An *interoperable video conferencing service* means a service that provides real-time video communications, including audio, to enable users to share information of the user's choosing.

The term *manufacturer* means an entity that makes or produces a product, including equipment used for advanced communications services, including end user equipment, network equipment, and software.

The term *network equipment* means equipment facilitating the use of a network, including, routers, network interface cards, networking cables, modems, and other related hardware. Such equipment may include both hardware and software components.

The term *nominal cost* in regard to accessibility and usability solutions means small enough so as to generally not be a factor in the consumer's decision to acquire a product or service that the consumer otherwise desires.

A *non-interconnected VoIP service* is a service that: (a) enables real-time voice communications that originate from or terminate to the user's location using Internet protocol or any successor protocol; and (b) requires Internet protocol compatible customer premises equipment; and (c) does not include any service that is an interconnected VoIP service.

The term *peripheral devices* means devices employed in connection with equipment, including software, covered by this part to translate, enhance, or otherwise transform ACS into a form accessible to individuals with disabilities. Peripheral devices may include mainstream devices and software.

The term *real-time text (RTT)* or *RTT communications* means text communications that are transmitted over IP networks immediately as they are created, e.g., on a character-by-character basis.

The term *service provider* means a provider of ACS that are offered in or affecting interstate commerce, including a provider of applications and services that can

be used for ACS and that can be accessed (*i.e.*, downloaded or run) by users over any service provider network.

The term *software* means programs, procedures, rules, and related data and documentation that direct the use and operation of a computer or related device and instruct it to perform a given task or function.

The term *specialized customer premises equipment (Specialized CPE)* means customer premise equipment which is commonly used by individuals with disabilities to achieve access.

The term *telecommunications* means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

The term *telecommunications service* means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

The term *usable* is defined in Section VI.B.2.

II. Introduction and Background

This manual provides a guide to complying with the FCC's rules that implement the statutory requirements for making advanced communications services (ACS) accessible to people with disabilities, the "ACS rules" and the requirements for making mobile internet browsers accessible to people who are blind or have a visual impairment ("accessible mobile browser rules."¹¹ The FCC adopted the ACS rules in an order released on October 7, 2011 (First ACS Order),¹² the accessible mobile browser rules in an order released on April 29, 2013 (Second ACS Order),¹³ and applied the ACS rules to interoperable video conferencing service (IVCS) rules in an order released on June

¹¹ The ACS and accessible mobile browser rules are codified in Part 14 of the FCC rules. For the current rules, including the specific rules referenced herein, see <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-14>.

¹² *Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Report and Order and Further Notice Of Proposed Rulemaking, 26 FCC Rcd 14557 (2011), <https://docs.fcc.gov/public/attachments/FCC-11-151A1.pdf>.

¹³ *Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Second Report and Order, 28 FCC Rcd 5957 (2013), <https://docs.fcc.gov/public/attachments/FCC-13-57A1.pdf>.

12, 2023 (IVCS Order).¹⁴ The FCC applied additional ACS rules to IVCS in a Second Report and Order released on September 27, 2024.¹⁵

The ACS rules are designed to make consumer electronics devices and services more accessible to disabled individuals. The ACS rules implement new sections 716 and 717 of the Communications Act of 1934 (Communications Act). Those new provisions were added to the Communications Act by the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), which became law on October 8, 2010.¹⁶

Objective and Approach of the Rules:

The objective of the ACS Rules and Sections 716 and 717 of the Communications Act is to increase the access of individuals with disabilities¹⁷ to several types of modern communications services. The ACS rules impose legal obligations on “covered entities”: ACS equipment manufacturers and ACS service providers.

To simplify discussion, the ACS rules include the following subcategories:

- Accessibility and usability rules, which contain the details of how covered entities must make ACS equipment and services accessible (discussed in Sections VI-VIII);
- Recordkeeping and certification rules, which describe the types of records that covered entities must keep (discussed in Section IX); and
- Enforcement rules, which set out the means by which consumers and others may complain about covered entities’ compliance with the new rules (discussed in Section X).

Accessibility and Usability Rules. The FCC has not specified a list of mandatory accessibility features for ACS equipment and services. Instead, the FCC requires covered entities to make their covered products and services accessible to and usable by disabled individuals, unless not “achievable.” If it is not achievable to make a covered

¹⁴ *Access to Video Conferencing et al.*, Report and Order, Notice of Proposed Rulemaking, and Order, CG Docket Nos. 23-161, 10-213, & 03-123, FCC 23-50 (rel. June 12, 2023) (IVCS Order), <https://docs.fcc.gov/public/attachments/FCC-23-50A1.pdf>.

¹⁵ *Access to Video Conferencing et al.*, Second Report and Order and Further Notice of Proposed Rulemaking, CG Docket Nos. 23-161, 10-213, & 03-123, FCC 24-95 (rel. Sept. 27, 2024) (IVCS 2R&O), <https://docs.fcc.gov/public/attachments/FCC-24-95A1.pdf>.

¹⁶ Sections 716, 717, and 718 of the Communications Act (47 U.S.C. §§ 617, 618 & 619) were added by the CVAA. A full copy of the CVAA can be found at <https://www.govinfo.gov/content/pkg/PLAW-111publ260/pdf/PLAW-111publ260.pdf>.

¹⁷ Individuals with disabilities include, but are not limited to, people with hearing, vision, movement, manipulative, speech, and cognitive disabilities. The definition of “disability” is not limited to these specific groups, and whether an individual has a disability is decided on a case-by-case basis.

product accessible to and usable by a disabled individual, covered entities must make the product compatible with peripheral devices or Specialized CPE commonly used by individuals with disabilities, unless such compatibility is not achievable. Section VI addresses these obligations. The accessibility and usability rules impose several other obligations related to network features, accessibility of information content, information pass-through, and product support. Section I.G discusses these requirements.

Please note that the ACS rules extend, but **do not** replace, the FCC's existing accessibility-related rules, including the rules that already govern telecommunications services, interconnected VoIP, and related services under section 255 of the Communications Act.¹⁸ Furthermore, the recordkeeping, certification, and enforcement rules for ACS (discussed below) also apply to services and equipment covered by section 255.

If equipment or services were subject to the requirements of section 255 prior to October 8, 2010, they remain subject to section 255 and the associated rules and regulations.¹⁹ Similarly, the FCC's ACS rules generally do not alter an entity's independent obligations, if any, under the Americans with Disabilities Act.

Recordkeeping and Certification Rules. Covered entities must document their efforts to make their devices accessible, or to incorporate third-party accessibility products. Documentation is crucial because consumer complaints may result in FCC enforcement proceedings against covered entities. Section IX discusses these requirements.

¹⁸ Section 255 was added to the Communications Act in 1996. Section 255 is similar to section 716 in structure and framework, but section 716 has a stricter standard for making equipment and services accessible and usable – “unless . . . not achievable” – compared to section 255's “if readily achievable” standard. Section 255 requires service providers and manufacturers to ensure that their covered products and services are “accessible to” and “usable by people” with disabilities, if “readily achievable.” Where access is not readily achievable, section 255 requires manufacturers and service providers to make their covered devices and services “compatible with” peripheral devices and Specialized CPE, if such compatibility is “readily achievable.”

Section 255 covers (i) customer premises equipment used by a person to originate, route or transmit telecommunications (including wireline and wireless telephones), pagers, fax machines and answering machines; (ii) basic telecommunications services, including basic voice calls, call waiting, call forwarding, and caller ID; and (iii) interactive voice response (IVR) systems, including voicemail.

The “if readily achievable” standard under section 255 requires a case-by-case determination for which the following is taken into consideration: financial resources of company and its parent, fundamental alteration (whether change would degrade other features or make them inoperable), and technical feasibility (a company is not required to make a feature accessible if technically infeasible).

¹⁹ 47 U.S.C. § 617(f); 47 C.F.R. § 14.2(c).

Enforcement Rules. Covered entities are subject to a variety of processes used by the FCC to satisfy customer complaints about the accessibility of products and to ensure compliance with the ACS rules. Section X discusses these requirements.

Accessible Mobile Browsers. In addition to the ACS rules, manufacturers are subject to the accessible mobile browser rules. The accessible mobile browser rules, although separate, are very similar to the ACS rules. However, they specifically aim to ensure that browsers included in mobile devices are accessible for individuals who are blind or visually impaired. Section XI discusses these requirements.

III. Effective Dates and Phase-In

This section discusses when the ACS rules will apply. Appendix A contains a list of deadlines.

A. ACS ACCESSIBILITY AND USABILITY RULES

The accessibility and usability rules generally became effective on **January 30, 2012**, subject to the phase-in period discussed below.

B. RECORDKEEPING AND CERTIFICATION REQUIREMENTS

Covered entities must keep records of their ACS compliance consistent with the FCC's rules governing recordkeeping **beginning on January 30, 2013**.

Covered entities were required to file their first certification with the FCC on **April 1, 2013** and must continue to file annually on April 1. IVCS manufacturers and providers were required to submit accessibility contact information and certifications of compliance with the ACS recordkeeping requirements (to the extent they have not filed in the database previously) by **October 3, 2024**.

C. FULL COMPLIANCE AND COMPLAINTS

The FCC provided a phase-in period to allow covered entities to achieve full compliance with the ACS accessibility and usability rules. As of **October 8, 2013**, covered entities were required to be in full compliance with the ACS rules, except for IVCS as discussed below.²⁰ After the effective date of any ACS rule, covered entities must take accessibility and usability into consideration during the design or redesign process.

In addition, on **October 8, 2013**, the FCC began accepting complaints from consumers and other interested parties, and covered entities will be subject to FCC investigations and enforcement actions.²¹

²⁰ 47 C.F.R. § 14.30(c).

²¹ In addition, section 718 of the Communications Act, also added by the CVAA, became effective on October 8, 2013 and requires the accessibility of mobile browsers for people who

Pursuant to class waivers granted by the FCC's Consumer and Governmental Affairs Bureau, the following classes of equipment and services were *not* subject to the requirements of the ACS rules until **October 8, 2015**: IP-TVs, IP-DVPs, cable operator-leased set-top boxes, game consoles, and game play and online game distribution services. Game software used for game play will be subject to the ACS requirements after December 31, 2017. These classes of products and services are defined in Section VIII.C.

IVCS providers must comply with the FCC's ACS rules no later than **September 3, 2024**, except for requirements newly adopted on September 26, 2024.²² IVCS providers and related equipment manufacturers must comply with the new IVCS-only requirements by **January 12, 2027**.²³

IV. What Products Do the ACS Rules Cover?

The ACS rules apply to two product categories: services and equipment.

A. SERVICES

Within the services category, there are five subcategories: (i) interconnected VoIP service, (ii) non-interconnected VoIP service, (iii) electronic messaging service, (iv) interoperable video conferencing service; and (v) any audio or video communications service used by inmates for the purpose of communicating with individuals outside the correctional institution where the inmate is held, regardless of technology used.²⁴

1. INTERCONNECTED VOIP SERVICES

An "interconnected VoIP service" is a VoIP service that allows a user to place calls to or receive calls from the legacy telephone network, also known as the public switched telephone network. Specifically, it (i) enables real-time, two-way voice communications, (ii) requires a broadband connection from the user's location, (iii) requires Internet protocol-compatible CPE, and (iv) permits users generally to place or receive calls that originate on the public switched telephone network.²⁵

For any interconnected VoIP service and related equipment that was offered by anyone prior to October 8, 2010, the FCC's section 255 accessibility rules, rather than the ACS rules, remain applicable. However, for an interconnected VoIP service (and equipment used for that service) developed after October 8, 2010, the FCC has

are blind or visually impaired, unless not achievable. See Section XI. The FCC began accepting complaints related to IVCS on September 3, 2024.

²² IVCS 2R&O.

²³ 89 Fed. Reg. 100878, <https://www.federalregister.gov/documents/2024/12/13/2024-27479/access-to-video-conferencing>.

²⁴ 47 U.S.C. § 153(1); 47 C.F.R. § 14.10(c). This manual does not discuss the fifth category, which is not a consumer service/technology.

²⁵ 47 C.F.R. § 9.3, *as incorporated by* 47 C.F.R. § 14.10(l).

reserved the discretion to apply the section 255 rules **or** the ACS rules (or neither). The FCC has noted that the definition of interconnected VoIP service may change over time.

2. NON-INTERCONNECTED VOIP SERVICES

A “non-interconnected VoIP service” is a service that (i) enables real-time voice communications that originate from or terminate to the user’s location using Internet protocol or any successor protocol, (ii) requires Internet protocol-compatible CPE, and (iii) does not include any service that is an interconnected VoIP service.²⁶ In other words, non-interconnected VoIP is VoIP that does not tie directly into the public switched telephone network or is not two-way. If a non-interconnected VoIP service is bundled with an interconnected VoIP service that is subject to the section 255 rules, the non-interconnected VoIP service must still comply with the ACS rules.

3. ELECTRONIC MESSAGING SERVICES

An “electronic messaging service” is a service that provides real-time or near real-time, non-voice messages in text form between individuals over communications networks (e.g., email, RTT, and instant messaging).²⁷ This classification includes messaging services provided through a social networking site or related site, but does **not** include machine-to-machine, human-to-machine, and machine-to-human communications.

4. INTEROPERABLE VIDEO CONFERENCING SERVICES

An “interoperable video conferencing service” is a service that provides real-time video communications, including audio, to enable users to share information of the user’s choosing.²⁸

Webinars and webcasts that provide real-time video communications, including audio, between two or more users, are “video conferencing services” and equipment, even if they can also be used for video broadcasting purposes. However, video mail and other non-real time features and functions do not meet the “real-time” component of the definition.

In the IVCS Order, the FCC determined that the ACS rules apply to all services and equipment that “provid[e] real-time video communications, including audio, to enable users to share information of the user’s choosing.”²⁹ The FCC also found the

²⁶ 47 C.F.R. § 14.10(q).

²⁷ *Id.* § 14.10(i); *Transition from TTY to Real-Time Text Technology; Petition for Rulemaking To Update The Commission’s Rules For Access To Support The Transition From TTY to Real-Time Text Technology, And Petition For Waiver Of Rules Requiring Support Of TTY Technology*, Report and Order and Further Notice Of Proposed Rulemaking, 31 FCC Rcd 13568 ¶ 25 (2016) (TTY-RTT Order), <https://docs.fcc.gov/public/attachments/FCC-16-169A1.pdf>.

²⁸ 47 C.F.R. § 14.10(m).

²⁹ IVCS Order ¶¶ 27-29.

definition of “interoperable video conferencing service” encompasses a variety of video communication services and that nothing in the definition suggests that it is limited to services that are only suitable for certain users. The FCC concluded the definition does not exclude any service based on whether it is used primarily for point-to-point or multi-point conversations or based on the type of device used to access the service. According to the FCC, what matters is that two or more people can use the service to share information with one another in real-time, via video.

B. EQUIPMENT

The ACS rules also apply to any equipment used for ACS, including but not limited to, tablets, laptops, desktops, smartphones, and any other physical machine or device used for ACS. Covered equipment includes both end user and network equipment and includes both the hardware and software components of such equipment.³⁰ However, the ACS rules do not directly cover standalone software that is used on a covered device, but is provided by neither the device manufacturer nor the ACS provider. For instance, Microsoft Outlook standing alone is not covered.

The ACS rules apply to equipment used for ACS irrespective of whether ACS is the primary function of the equipment. There is no exception if equipment merely uses ACS on an “incidental” basis. However, as discussed below, it is possible for the FCC to grant a waiver of the ACS rules for a device that has a primary purpose other than for ACS use, but nonetheless, provides access to ACS on an incidental basis.

For multipurpose devices, including, for example, devices used for both telecommunications services and ACS, the section 255 rules apply to the telecommunications services and to services classified as interconnected VoIP prior to October 8, 2010, as well as the equipment components used for those services, and the ACS rules apply to non-interconnected VoIP, electronic messaging, and interoperable video conferencing services, as well as the equipment components used for those services.

V. What Companies Do the ACS Rules Cover?

A. PROVIDERS OF ACS

The ACS rules apply to ACS “service providers,” which is an extremely broad category. ACS providers include those who:

- Provide applications and services that can be used for ACS and that can be accessed (*i.e.*, downloaded or run) by users over any service provider network;³¹
- All entities that make ACS available, including entities that provide ACS over their own networks;

³⁰ *Id.* § 14.10(j), (o).

³¹ *Id.* § 14.10(s).

- Providers of applications or services accessed by users over other service providers' networks, for example, providers of web-based e-mail services available to consumers, non-interconnected VoIP services through applications that consumers download to their devices, and texting services over a cellular network; and
- Service resellers and aggregators of ACS.

The FCC is not imposing independent regulatory obligations on providers of standalone software (like Microsoft Outlook) that are neither equipment manufacturers nor providers of ACS.

B. MANUFACTURERS OF EQUIPMENT USED FOR ACS

The ACS rules also apply to manufacturers of equipment used for advanced communications services. The term "manufacturer" means an entity that makes or produces a product, including equipment used for advanced communications services, including end user equipment, network equipment, and software.³² Again, the obligations of equipment manufacturers do not apply to standalone software providers.

C. LIMITATIONS ON LIABILITY

Entities that merely provide transmission services or certain types of "information location tools" are exempt from liability for violations of the ACS rules.³³ For instance, liability for ACS rule compliance would not extend to a broadband internet service provider (although other accessibility obligations attach as a result of the 2024 Open Internet Order).³⁴ If the broadband provider is simultaneously offering ACS services as part of its transmission service, then it will be subject to the ACS rules.

VI. If a Product or Entity is Covered, How Does It Comply?

A. THE BASICS

Covered entities have the following core obligations:

- **Covered service providers:** An ACS provider must ensure that services it offers in or affecting interstate commerce are accessible to and usable by individuals with disabilities, unless doing so is not achievable.³⁵

³² *Id.* § 14.10(m).

³³ See 47 U.S.C. § 153 note.

¹⁹ *Safeguarding and Securing the Open Internet, Restoring Internet Freedom*, Declaratory Ruling, Order, Report and Order, and Order on Reconsideration, WC Docket Nos. 23-320 & 17-108 (rel. May 7, 2024) (reclassifying broadband internet access service as a telecommunications service subject to Section 255 of the Communications Act). The Sixth Circuit stayed this order on August 1, 2024, and the appeal remains pending.

³⁵ 47 U.S.C. § 617(b)(1); 47 C.F.R. § 14.20(a)(2).

- **Covered manufacturers**: For equipment manufactured after the effective date of the regulations, a manufacturer of equipment used for ACS, including end user equipment, network equipment, and software, must ensure that its equipment and software that it offers for sale or otherwise distributes in interstate commerce must be accessible to and usable by individuals with disabilities, unless doing so is not achievable.³⁶
- **Compatibility**: If accessibility is not achievable either by building it in or by using accessibility solutions, supplied by third parties, that are available to consumers at nominal cost that individuals with disabilities can access, then a covered entity must ensure that its equipment or service is compatible with existing peripheral devices or Specialized CPE, unless not achievable.

Section VII below discusses how the FCC analyzes what is “not achievable.” **Appendix C** provides a simplified decisional flowchart for ACS compliance.

B. PERFORMANCE OBJECTIVES

A covered entity is required to ensure that its covered products are accessible to and useable (as defined below) by individuals with disabilities, unless not achievable. The FCC has adopted numerous performance objectives that inform the accessibility and usability definitions for individuals with disabilities. These performance objectives are not specific engineering standards. Instead, the FCC has articulated goals that covered entities must consider when in the development process of ACS equipment or services. The fact that these goals are not quantitative should reinforce the importance of the recordkeeping requirements outlined in Section IX.

1. WHAT DOES “ACCESSIBLE” MEAN?

The term “accessible” means:

- First, that input, control, and mechanical functions shall be locatable, identifiable, and operable in accordance with each of the following, assessed independently but subject to the “unless not achievable” standard (discussed below):
 - Operable without vision. Provide at least one mode that does not require user vision.
 - Operable with low vision and limited or no hearing. Provide at least one mode that permits operation by users with visual acuity between 20/70 and 20/200, without relying on audio output.
 - Operable with little or no color perception. Provide at least one mode that does not require user color perception.
 - Operable without hearing. Provide at least one mode that does not require user auditory perception.

³⁶ 47 U.S.C. § 617(a)(1); 47 C.F.R. § 14.20(a)(1).

- Operable with limited manual dexterity. Provide at least one mode that does not require user fine motor control or simultaneous actions.
- Operable with limited reach and strength. Provide at least one mode that is operable with user limited reach and strength.
- Operable with a Prosthetic Device. Controls shall be operable without requiring body contact or close body proximity.
- Operable without time-dependent controls. Provide at least one mode that does not require a response time or allows response time to be by-passed or adjusted by the user over a wide range.
- Operable without speech. Provide at least one mode that does not require user speech.
- Operable with limited cognitive skills. Provide at least one mode that minimizes the cognitive, memory, language, and learning skills required of the user.³⁷
- Second, that all information necessary to operate and use the product, including but not limited to, text, static or dynamic images, icons, labels, sounds, or incidental operating cues, must comply with each of the following, assessed independently but subject to the “unless not achievable” standard:
 - Availability of visual information. Provide visual information through at least one mode in auditory form.
 - Availability of visual information for low vision users. Provide visual information through at least one mode to users with visual acuity between 20/70 and 20/200 without relying on audio.
 - Access to moving text. Provide moving text in at least one static presentation mode at the option of the user.
 - Availability of auditory information. Provide auditory information through at least one mode in visual form and, where appropriate, in tactile form.³⁸
 - Availability of auditory information for people who are hard of hearing. Provide audio or acoustic information, including any auditory feedback tones that are important for the use of the product, through at least one mode in enhanced auditory fashion (*i.e.*, increased amplification, increased signal to noise ratio, or combination).
 - Prevention of visually induced seizures. Visual displays and indicators shall minimize visual flicker that might induce seizures in people with photosensitive epilepsy.
 - Availability of audio cutoff. Where a product delivers audio output through an external speaker, provide an industry standard connector for headphones or

³⁷ 47 C.F.R. § 14.21(b)(1).

³⁸ There is an additional aspect of “availability of auditory information” for IVCS, see below.

- personal listening devices (e.g., phone like handset or earcup) which cuts off the speaker(s) when used.
- Noninterference with hearing technologies. Reduce interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) to the lowest possible level that allows a user to utilize the product.
 - Hearing aid coupling. Where a product delivers output by an audio transducer which is normally held up to the ear, provide a means for effective wireless coupling to hearing aids.³⁹

Note that the last two requirements above, regarding hearing aids, do not replace or in any way alter compliance with the FCC's hearing aid compatibility rules, a separate group of rules not addressed in the manual.⁴⁰

- Third, that covered wireless interconnected VoIP services and text-capable end user devices used with such services that do not themselves provide TTY functionality, may provide TTY connectability and signal compatibility pursuant to the compatibility provisions of the rule or support real-time text communications, in accordance with 47 C.F.R. part 67.⁴¹
- Fourth, beginning **January 12, 2027**, IVCS and covered equipment and software used with IVCS must:
 - Provide at least one mode with captions that accurately and synchronously display the spoken communications in a video conference, and enable users to connect with third-party captioning services so that captions provided by such services appear on the requesting user's video conference screen. "Accurately" means that captioning matches the spoken words of a conversation, in the order spoken, verbatim, without summarizing or paraphrasing, sufficiently to enable a user to understand what is being said, and "synchronously" means that, to the greatest extent possible, the captions begin to appear at the time that the corresponding speech or sounds begin and end approximately when the speech or sounds end, are delivered fast enough to keep up with the speed of those words and sounds, and remain displayed long enough to be read by the user.
 - Enable the use of sign language interpretation provided by third parties, including the transmission of user requests for sign language interpretation to providers of video relay service and other entities and the provision of sufficient video quality to support sign language communication.

³⁹ *Id.* § 14.21(b)(2).

⁴⁰ See generally 47 C.F.R. § 20.19 (wireless hearing aid compatibility rules), <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-B/part-20/section-20.19>; *id.* §§ 68.300-68.423 (wireline hearing aid compatibility rules), <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-B/part-68?toc=1>.

⁴¹ 47 C.F.R. § 14.21(b)(3). This requirement was adopted as part of the TTY-RTT Order.

- Provide user interface control functions that permit users to activate and adjust the display of captions, speakers, and signers and other features for which user control is necessary for accessibility. “Adjust the display of captions” means that a video conference participant can alter the size, font, and on-screen location of captions and adjust the color and opacity of both the captions and the caption background. “Adjust the display of speakers and signers” means that video conference participants can minimize or hide extraneous windows, expand the windows of their choice, or relocate particular windows; and edit their own display names before or after joining a video conference.

2. WHAT DOES “USABLE” MEAN?

The term “usable” means that individuals with disabilities have access to the full functionality and documentation for the product, including instructions, product information (including accessible feature information), documentation and technical support functionally equivalent to that provided to individuals without disabilities.⁴²

C. PRODUCT DESIGN, DEVELOPMENT, AND EVALUATION

Covered entities are required to consider the accessibility and usability performance objectives and definitions set forth above as early as possible in the design stage and must implement such performance objectives, to the extent that they are achievable. To implement the performance objectives, covered entities may take a variety of steps, such as:

- Consulting with individuals with disabilities or groups representing individuals with disabilities, as well as experts on accessibility.⁴³
- Monitoring marketplace developments and offerings regarding accessibility features and solutions.
- Establishing an internal process for systematically considering accessibility and usability performance objectives and definitions as early as possible in the design stage.

In addition, manufacturers and service providers must identify barriers to accessibility and usability as part of their evaluation.⁴⁴

D. INDUSTRY FLEXIBILITY: BUILT-IN OR THIRD-PARTY SOLUTIONS?

Covered entities may provide accessibility and usability features through either built-in solutions or third-party solutions. If a covered entity chooses to employ third-party solutions, those solutions must be (i) accessible to individuals with disabilities and

⁴² 47 C.F.R. § 14.21(c).

⁴³ As discussed below in Section I.A, the ACS rules require that a covered entity maintain records of its efforts to consult with individuals with disabilities.

⁴⁴ 47 C.F.R. § 14.20(b).

(ii) available to consumers at nominal cost (*i.e.*, fees small enough so as to not be a factor in a consumer's decision to acquire a desired product).⁴⁵

- A covered entity that chooses to use a third-party accessibility solution has the responsibility to identify, notify consumers of, find, and arrange to install and support the third-party technology along with the covered entity's product.
- A covered entity must provide support for the third-party accessibility solution for the life of the ACS product, or for a period of up to **two years** after the third-party solution is discontinued, whichever comes first, provided that, if the third-party solution is discontinued, another third-party accessibility solution is made available by the covered entity at nominal cost to the consumer.
- A covered entity may make available third-party solutions in the after-market, if those solutions are made available about the same time as when the product or service is purchased.
- If the third-party solution by its nature requires technical assistance with set-up or maintenance, the covered entity must either provide those functions or arrange for a third party to provide them.
- A covered entity may rely on a wide range of third-party accessibility solutions to comply with the ACS rules. If the use of a third-party solution becomes the subject of an enforcement proceeding, the FCC will determine whether such use complies with the ACS rules on a case-by-case basis.

E. COMPATIBILITY

If accessibility and/or usability is not achievable either by building it into a device or service or by using third-party accessibility solutions available to the consumer at nominal cost, then a manufacturer or service provider must ensure that its equipment or service is **compatible** with existing peripheral devices or Specialized CPE commonly used by individuals with disabilities to achieve access, unless such compatibility is not achievable.⁴⁶

Compatibility requires compliance with the following provisions, as applicable, unless not achievable:

- **External electronic access.** Information needed for the operation of products (including output, alerts, icons, on-line help, and documentation) is to be available in a standard electronic text format on a cross-industry standard port and all input to and control of a product shall allow for real time operation by electronic text input into a cross-industry standard external port and in cross-industry standard format. The cross-industry standard port cannot require manipulation of a connector by the user.

⁴⁵ 47 U.S.C. § 617(a)(2), (b)(2); 47 C.F.R. § 14.10(p).

⁴⁶ 47 C.F.R. § 14.20(a)(3).

- Connection point for external audio processing devices. Products providing auditory output must provide the auditory signal at a standard signal level through an industry standard connector.
- TTY connectability. Products that provide a function allowing voice communication and which do not themselves provide a TTY functionality must provide a standard non-acoustic connection point for TTYs. It also must be possible for the user to easily turn any microphone on and off to allow the user to intermix speech with TTY use.
- TTY signal compatibility. Products, including those providing voice communication functionality, must support use of all cross-manufacturer non-proprietary standard signals used by TTYs.⁴⁷

In 2016, the FCC adopted new rules allowing service providers and manufacturers to support RTT in compliance with a new Part 67 of the Commission's rules,⁴⁸ in lieu of the above requirements related to TTY. Manufacturers opting to support RTT in lieu of their TTY requirements must have supported RTT by **December 31, 2018**, or, after that date, when the device goes on the market.

Covered entities are responsible for identifying the types of peripheral devices and Specialized CPE "commonly used" by people with disabilities with which their products and services should be made compatible. This responsibility implies that covered entities must continue to keep current with the types of peripheral devices and Specialized CPE "commonly used" by people with disabilities.

Such peripheral devices and Specialized CPE may include devices that are no longer manufactured. Moreover, for compatibility to be achieved, a third party add-on must be an available solution that the consumer can access to make the underlying product or service accessible. Covered entities have an ongoing duty to consider how to make their products compatible with the software and hardware components and devices that people with disabilities use to achieve access and to include this information in their records.

F. NO SAFE HARBORS

The FCC has the authority to adopt technical standards as "safe harbors" for rule compliance, but declined to adopt any such safe harbors at this time.

G. OTHER OBLIGATIONS

Whether or not accessibility, usability, and compatibility can be achieved, covered entities have a basic obligation to design services and devices that do not inhibit accessibility features.

⁴⁷ *Id.* § 14.21(d).

⁴⁸ See 47 C.F.R. Part 67, <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-B/part-67>.

1. NETWORK FEATURES

ACS providers may not install network features, functions, or capabilities that impede accessibility or usability.⁴⁹ This obligation applies when the accessibility or usability of ACS is incorporated in accordance with recognized industry standards. Such providers and other stakeholders should use working groups to develop standards that will ensure accessibility as the industry applies network management policies or other similar activities that may impede accessibility. However, the FCC will not delay enforcement of its rules beyond the phase-in period while such standards are developed.

2. ACCESSIBILITY OF INFORMATION CONTENT

ACS and the equipment and networks used with ACS may not impair or impede the accessibility of information content when accessibility features have been incorporated into that content for transmission.⁵⁰ This requirement applies where the accessibility of such content has been incorporated in accordance with recognized industry standards, including (i) international standards from an international standards body; (ii) standards created by other commonly recognized standards groups that are widely used by industry; (iii) de-facto standards created by one company, a group of companies, or industry consortia that are widely used in the industry. To be clear, sources of “recognized industry standards” are broader than just those developed in consensus-based, industry-led, open processes that comply with ANSI Essential Requirements.

In addition, manufacturers and service providers are not liable under the ACS rules for content or embedded accessibility content (e.g., captioning or video description) that they do not create or control.⁵¹

3. INFORMATION PASS-THROUGH

ACS equipment, including end user equipment, network equipment, and software, must pass-through cross-manufacturer, nonproprietary, industry-standard codes, translation protocols, formats or other information necessary to provide advanced communications services in an accessible format, if achievable. Signal compression technologies may not remove information needed for access or shall restore it upon decompression.⁵²

⁴⁹ 47 U.S.C. § 617(d); 47 C.F.R. § 14.20(a)(4).

⁵⁰ 47 C.F.R. § 14.20(a)(5).

⁵¹ FCC rules not addressed in this manual govern, for example, closed captioning of video programming delivered over IP. See *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, Report and Order, 27 FCC Rcd 787 (2012).

⁵² *Id.* § 14.20(c).

4. PRODUCT INFORMATION, DOCUMENTATION, TRAINING, AND CUSTOMER SUPPORT

Covered entities must ensure that the information and documentation that they provide to customers is accessible, if achievable (applying the same four-factor test as discussed below).

Such information and documentation include, but is not limited to, user guides, bills, installation guides for end user devices, and product support communications. The requirement to ensure the information is accessible also includes ensuring that individuals with disabilities can access, at no extra cost, call centers and customer support regarding both the product generally and the accessibility features of the product.⁵³

VII. Applying the “Unless Not Achievable” Test – The Four Factors

A covered entity is required to ensure that its ACS products and services are accessible to and useable by individuals with disabilities, **unless not achievable**. “Achievable” means “with reasonable effort or expense.”⁵⁴ The CVAA defines four factors that the FCC will consider in an enforcement proceeding against a covered entity regarding whether an ACS performance objective was, in fact, achievable. The FCC is limited to consideration of only those four factors in determining “achievability.” In internal decision-making, covered entities should consider these factors as well. Then, if the FCC investigates an entity’s accessibility compliance or if an entity is the subject of an informal or formal complaint, the process of demonstrating an achievability analysis will be simplified. An achievability determination must be limited to these four factors, and each factor is to be weighed equally.

The FCC presumes that a covered entity is able to meet the requirements of the ACS rules, unless it can prove otherwise. Therefore, if a covered entity fails to keep adequate records explaining why it did or did not include accessibility features in its products – that is, its decisions regarding what is “achievable” under the ACS rules – it risks potentially large fines. In sum, the covered entity bears the burden of proof in showing why it deemed that making the product or service accessible was not achievable.

A. NATURE AND COST OF THE PRODUCT

The FCC will weigh “the nature and cost of the steps needed to meet the accessibility requirements with respect to the specific equipment or service in question.”⁵⁵

⁵³ *Id.* § 14.20(d).

⁵⁴ 47 U.S.C. § 617(g).

⁵⁵ *Id.* § 617(g)(1); 47 C.F.R. § 14.10(b)(1).

The FCC recognizes that if an accessibility feature “fundamentally alters” a product or service, then it is “not achievable” to include that feature in that product or service. A “fundamental alteration” means to reduce substantially the functionality of the product, to render some features inoperable, to impede substantially or deter use of the product by individuals without the specific disability the feature is designed to address, or to alter substantially and materially the shape, size or weight of the product.

The FCC has stated that in many cases, features such as voice output can be added in ways that do not fundamentally alter the product, even if earlier versions of the product did not have that capability. Since all accessibility enhancements in one sense require an alteration to the design of a product or service, not all changes to a product or service will be considered fundamental alterations. Rather, the alteration to the product or service must be fundamental for the accessibility feature to be considered *per se* not achievable. The “not achievable because of a fundamental alteration” standard is difficult to satisfy, so covered entities must be prepared to defend their decision-making.

One important criterion the FCC will evaluate under this factor is whether an accessibility feature has been implemented for competing products or services. If an accessibility feature has been implemented by a competitor or other manufacturer, then it is more likely that implementation of the accessibility feature is achievable. Therefore, a covered entity should consider the accessibility features of competing products or services, and, if those same features cannot be implemented in the covered entity’s product, the covered entity should be prepared to explain why.

However, a covered entity may rebut evidence provided by competing products or services by demonstrating that the circumstances of the product or service offered by that particular entity renders the feature not achievable.

Please note that, for purposes of this factor, a covered entity cannot rely on a comparison of the cost of compliance to the overall production cost of the product.

B. TECHNICAL AND ECONOMIC IMPACT ON THE COVERED ENTITY

The FCC recognizes that a covered entity may not have the resources to incorporate an accessibility feature into its product or service and further recognizes that the inclusion of an accessibility feature may have a greater impact on a small entity than a larger one. The covered entity must consider “the technical and economic impact on the operation of the manufacturer or provider and on the operation of the specific equipment or service in question, including on the development and deployment of new communications technologies.”⁵⁶ The FCC will weigh both the costs of making a product or service accessible and an entity’s total gross revenues. In contrast to the first factor, the covered entity may appropriately consider the cost of compliance in comparison to the overall cost of producing a product or service when evaluating this factor.

⁵⁶ 47 U.S.C. § 617(g)(2); 47 C.F.R. § 14.10(b)(2).

C. TYPE OF OPERATIONS

The FCC will weigh the covered entity's experience in the ACS market; therefore, the covered entity must consider its operations as a manufacturer and/or service provider when making an achievability determination.⁵⁷ The covered entity's experience in the various telecommunications and information technology markets is relevant to the determination of this factor. In addition, the entity's size, resources, business models, technology configurations, and platforms are also relevant factors. However, the fact that a covered entity has substantial financial resources does not, by itself, trigger a finding of achievability.

D. EXTENT OF ACCESSIBLE OFFERING

Finally, the FCC will weigh "the extent to which the service provider or manufacturer in question offers accessible services or equipment containing varying degrees of functionality and features, and offered at differing price points."⁵⁸

Not every product has to integrate all accessibility criteria. Covered entities generally need not consider what is achievable with respect to every product, if the entity offers consumers with the full range of disabilities meaningful choices through a range of accessible products with varying degrees of functionality and features, at differing price points.

If a line of products includes low-end products, then it is just as important that low-end products and services be accessible as high-end products and services if achievable.

In addition, a covered entity may need to bundle accessibility features (e.g., a screen reader and a voice interactive menu for a blind user) within a single device to serve a particular type of disability, if achievable.

VIII. Exemptions and Waivers

A. EXEMPTIONS

This section discusses specific exemptions from the ACS rules.

1. CUSTOMIZED EQUIPMENT OR SERVICES

The ACS rules do not apply to customized equipment or services that are not offered directly to the public.⁵⁹ The exemption is limited to customized equipment and services (including public safety communications networks and devices)⁶⁰ offered only

⁵⁷ 47 U.S.C. § 617(g)(3); 47 C.F.R. § 14.10(b)(3).

⁵⁸ 47 U.S.C. § 617(g)(4); 47 C.F.R. § 14.10(b)(4).

⁵⁹ 47 C.F.R. § 14.3(a).

⁶⁰ *Id.* § 14.10(g).

to business and other enterprise customers. The exemption does not apply to “customizations” that are merely cosmetic or do not significantly change the functionalities of a device or service. Further, the exemption does not apply to ACS manufacturers or service providers who offer their products to a “discrete industry segment” and only a “relatively small number of individuals.”

2. TEMPORARY EXEMPTION FOR SMALL ENTITIES

Prior to October 18, 2013, a covered entity was exempt from the obligations set forth in the ACS rules if such entity, at the start of the design of a product or service (i) qualified as a business concern under section 13 C.F.R. § 121.105, and (ii) together with its affiliates, as determined by 13 C.F.R. § 121.103, met the relevant small business size standard established in 13 C.F.R. § 121.201 for the primary industry in which it is engaged as determined by 13 C.F.R. § 121.107.⁶¹

B. IMPLIED EXEMPTION: BETA TESTING

Although not an express exemption, the FCC indicated that generally it will not take enforcement action with respect to a product or service in beta testing **unless** a party is using beta status to avoid accessibility obligations.

C. WAIVERS

The FCC may waive the ACS rules upon application by a covered entity. To date, waivers of the ACS rules, some of which have expired, have been granted for the following classes of equipment and services, which were identified in petitions filed by CTA, NCTA, the Coalition of E-Reader Manufacturers, and the Entertainment Software Association (ESA):

- Internet protocol-enabled television sets (IP-TVs) and IP-enabled digital video players (IP-DVPs) (expired);⁶²
- Set-top boxes leased by cable operators to their customers (expired);⁶³
- E-readers whose primary purpose is reading text-based digital works;⁶⁴

⁶¹ *Id.* § 14.4.

⁶² The CTA Class Waiver Petition defined IP-TVs as televisions that allow consumers to access and use ACS via IP and are designed to display video content, principally full-length, professional-quality video programming, not ACS. The CTA petition defined IP-DVPs as digital video players that allow consumers to access and use ACS via IP and that are designed primarily for the playback and rendering of video content, principally full-length, professional-quality video programming, not ACS.

⁶³ The NCTA Class Waiver Petition defined set-top boxes as standalone devices that are primarily designed to convert the video signals delivered by cable systems to consumers' homes and transmit the converted signal to television sets or other display devices for viewing.

⁶⁴ The waiver applies to e-readers that while capable of accessing ACS, are designed primarily for reading text-based digital works, not ACS. The original waiver was set to expire January 28,

- Game consoles, both home and handheld, and their peripherals and integrated online networks (expired);⁶⁵
- Game distribution and online game play services that distribute game software or enable online game play across a network (expired);⁶⁶ and
- Game software used for game play (expired).⁶⁷

These class waivers of the ACS rules were granted on October 15, 2012, in an Order released by the FCC's Consumer and Governmental Affairs Bureau on delegated authority. These were the first waivers granted by the FCC under the ACS rules. Each of these class waivers expired on October 8, 2015—two years after the October 8, 2013 deadline for full compliance with the ACS accessibility rules—except for the class of video game software, which was extended to December 31, 2017. The Bureau granted an indefinite extension of the waiver for certain, basic e-readers. The products and services covered by a waiver are subject to the waiver for the duration of the life of those products and services. During the waiver period, equipment and services falling within the scope of the covered classes are not be required to comply with the general accessibility obligations of section 14.20 of the FCC's rules, the performance objectives of section 14.21, and the recordkeeping obligations of section 14.31.

Waivers are granted on a case-by-case basis and evaluated on the following factors:

- Whether the equipment or service in question is designed primarily for purposes other than using ACS;⁶⁸
- Whether the equipment or service was marketed on the basis of its ACS features or functions;⁶⁹ and

2014, but was then extended to January 28, 2015 before being indefinitely extended on February 1, 2016.

⁶⁵ As explained in the ESA Class Waiver Petition, this class of devices would share many similar characteristics including: custom hardware and operating systems designed for game play; an integrated online network and marketplace unique to that platform and that emphasizes game play functions while also providing ancillary functions; and parental control systems.

⁶⁶ As explained in the ESA Class Waiver Petition, this class consists of services that share a common purpose of distributing games and enabling game play but are not games themselves. Examples of covered services include game download services, game streaming services, web sites directed to hosting games or game-related support services, and online game networks (including those associated with game consoles, when accessed through devices *other* than a game console).

⁶⁷ As explained in the ESA Class Waiver Petition, this class covers game software in all of its forms, including online games, and is distinguishable from other software and entertainment media.

⁶⁸ *Id.* § 14.5(a)(1).

⁶⁹ *Id.* § 14.5(a)(2).

- The FCC will evaluate the request against its general waiver standard, which requires good cause to waive the rules and a showing that particular facts make compliance inconsistent with the public interest.

The FCC will entertain requests for waiver for equipment and services individually or as a class. Individual waiver requests must be specific to an individual product or service offering. New, different, or substantially upgraded products will require new waivers. Individual waiver petitioners must explain the anticipated lifecycle for the product or service for which the petitioner seeks a waiver. An individual waiver request may be granted for the life of the service or equipment as supported by record evidence, or for such time as the FCC determines,⁷⁰ with or without a provision for renewal.

The FCC will only grant class waivers when classes are carefully defined and when doing so would promote greater predictability and certainty for all stakeholders. In addition to defining the class with specificity and demonstrating similarities among class members,⁷¹ waiver applicants also must explain in detail the expected lifecycle for the equipment or services that are part of the class. All products and services covered by a class waiver that are introduced into the market while the waiver is in effect will ordinarily be subject to the waiver for the duration of the life of those particular products and services.⁷² The FCC will examine the justification for a class waiver extending through the lifecycle of each discrete generation to the extent that a petitioner seeks waiver for multiple generations of similar equipment and services.

The FCC will seek to complete action on a waiver application within 180 days of public notice. All waiver requests will be placed on public notice, with a minimum of 30 days for comments and oppositions.⁷³

IX. Recordkeeping and Certification

A. RECORDKEEPING REQUIREMENTS

Covered entities are required to maintain records of their efforts to implement the ACS rules (as well as the FCC rules associated with section 255 and eventually section 718, which governs certain aspects of mobile browsers), including:

- Information about the manufacturer's or provider's efforts to consult with individuals with disabilities;
- Descriptions of the accessibility features of its products and services; and

⁷⁰ *Id.* § 14.5(c)(1).

⁷¹ *Id.* § 14.5(b).

⁷² *Id.* § 14.5(c)(2).

⁷³ *Id.* § 14.5(d).

- Information about the compatibility of such products and services with peripheral devices or Specialized CPE commonly used by individuals with disabilities to achieve access.⁷⁴

The recordkeeping obligations became effective on **January 30, 2013**.

Covered entities that do not make their products or services accessible and claim as a defense that it is not achievable for them to do so must be prepared to produce sufficient records regarding their consideration of the four achievability factors, discussed above.

- The nature and cost of the steps needed to make equipment and services accessible in the design, development, testing, and deployment process to make a piece of equipment or software in the case of a manufacturer, or service in the case of a service provider, usable by individuals with disabilities;
- The technical and economic impact on the operation of the covered entity and on the operation of the specific equipment or service in question, including on the development and deployment of new communications technologies;
- The type of operations of the covered entity; and,
- The extent to which the covered entity offers accessible services or equipment containing varying degrees of functionality and features, and offered at differing price points.

Failure to provide sufficient explanation and supporting evidence will result in an FCC decision against the covered entity and in favor of the complaining party.

Covered entities that elect to satisfy the accessibility requirements using third-party applications, peripheral devices, software, hardware, or Specialized CPE, must also be prepared to produce relevant documentation.

Covered entities are required to **retain records for a period of two years from the date the covered entity ceases to offer** or in any way distribute the product or service to the public (including through resellers or third parties).⁷⁵ Even upon the expiration of the mandatory two-year document retention rule, covered entities must prove accessibility or that accessibility was not achievable in the event that a complaint is received.

B. ANNUAL CERTIFICATION

An officer of each covered entity must sign and file an annual compliance certificate with the FCC. The certificate must state that the covered entity has established operating procedures that are adequate to ensure compliance with the recordkeeping rules and be supported with an affidavit or declaration under penalty of

⁷⁴ 47 U.S.C. § 618(a)(5)(A); 47 C.F.R. § 14.31(a).

⁷⁵ 47 C.F.R. § 14.31(a).

perjury, signed and dated by an authorized officer of the company with personal knowledge of the representations provided in the company's certification, verifying the truth and accuracy of the information therein.⁷⁶

The certificate must also identify the name and contact details of the person or persons within the company that are authorized to resolve complaints alleging violations of the ACS rules, and the agent designated for service and provide contact information for this agent. Contact information shall include, for the covered entity, a name or department designation, business address, telephone number, and, if available, TTY number, facsimile number, and e-mail address.⁷⁷

The FCC required each covered entity to **file its first annual certification on April 1, 2013**, and then annually thereafter, or whenever contact information changes.⁷⁸ Covered entities must submit their certificates and contact information electronically using the Commission's Recordkeeping Compliance Certification and Contact Information Registry, which may be accessed at the following web address: <https://apps.fcc.gov/rccci-registry/>.

C. PRODUCTION OF RECORDS; CONFIDENTIALITY

Upon the service of a complaint, formal or informal, the covered entity must produce to the FCC, upon request, records covered by the recordkeeping requirement set forth in 47 C.F.R. § 14.31(a) and may assert a statutory request for confidentiality for these records under 47 U.S.C. § 618(a)(5)(C) and 47 C.F.R. § 0.457(c). All other information submitted to the FCC pursuant to this subpart or pursuant to any other request by the FCC may be submitted pursuant to a request for confidentiality in accordance with 47 C.F.R. § 0.459.⁷⁹

X. Consumer Complaints and FCC Proceedings (FCC Enforcement Process)

On **October 8, 2013**, the FCC began taking complaints on alleged violations of section 716 and Section 718 (mobile browser accessibility) of the Communications Act and the associated ACS rules and also began utilizing the process set forth below to address alleged violations of section 255 (telecommunications accessibility) and the associated implementing rules.

⁷⁶ *Id.* § 14.31(b)(1).

⁷⁷ *Id.* §§ 14.31(b)(2), 14.35(b).

⁷⁸ *Id.* § 14.31(b)(3). IVCS manufacturers and providers were required to submit accessibility contact information and certifications of compliance with the ACS recordkeeping requirements (to the extent they have not filed in the database previously) by October 3, 2024. *Due Date for Filing of Accessibility Certifications and Contact Information for Interoperable Video Conferencing Services and Equipment*, Public Notice, CG Docket Nos. 03-123, 10-213, 23-161, DA 24-733 (CGB rel. July 29, 2024).

⁷⁹ *Id.* § 14.31(c).

Consistent with the overall purpose of this manual, the discussion below focuses on the enforcement of the ACS rules.

A. CGB DISPUTE ASSISTANCE PROCESS

Prior to filing an informal complaint with the FCC, a consumer or other potential complainant must first file a “Request for Dispute Assistance” (“Request”) with the FCC’s Consumer and Government Affairs Bureau (“CGB”), which will then forward a copy of the Request to the named entity and assist the potential complainant and the covered entity in reaching a settlement of the dispute.⁸⁰ This process is designed to provide the covered entity with an opportunity to resolve the dispute before becoming enmeshed in an adversarial proceeding before the FCC. The potential complainant and the covered entity may mutually agree to extend the CGB dispute assistance process for an additional 30 days and in 30-day increments thereafter.

Thirty days after the Request is filed, if a settlement has not been reached, the potential complainant may then file an informal complaint with the FCC.⁸¹ The filing of an informal complaint closes the CGB dispute assistance process.⁸²

B. INFORMAL COMPLAINT PROCESS

The informal complaint process makes it possible for an individual consumer or other interested party to initiate an FCC investigation of a covered entity for an alleged violation of these rules. Despite its name, the informal complaint process is serious because it could result in substantial fines. Although an individual or other interested party may file an informal complaint,⁸³ the FCC’s investigation of an informal complaint is directed to violations of the Communications Act and the ACS rules and is not limited to the issues raised by an individual complainant seeking to obtain an accessible product or service. To be clear, an informal complaint proceeding is adversarial and has many of the hallmarks of a formal complaint proceeding, as detailed below. Note that the FCC has only 180 days from the time an informal complaint is filed until it must issue an order finding whether the covered entity violated the ACS rules.⁸⁴

1. INFORMAL COMPLAINT REQUIREMENTS

An informal complaint must include (i) the contact information of the complainant, (ii) the contact information for the covered entity against whom the complaint is made, (iii) the date or dates on which the complainant either purchased, acquired, or used or attempted to purchase, acquire, or use the equipment or service about which the complaint is being made, (iv) a complete statement of fact explaining why the

⁸⁰ *Id.* § 14.32(c)-(d).

⁸¹ *Id.* § 14.32(e).

⁸² *Id.* § 14.32(f).

⁸³ Note that there is no standing requirement – any person or entity may file an informal or formal complaint with the Commission.

⁸⁴ 47 U.S.C. § 618(a)(3)(B); 47 C.F.R. § 14.37(a).

complainant contends that the defendant is in violation of the CVAA or the ACS rules, including details regarding the service or equipment and the relief requested, and all supporting documentation; (v) a certification that the complainant submitted a Request for Dispute Assistance, no less than 30 days before the complaint is filed; (vi) the complainant's preferred format or method of response to the complaint by the FCC and defendant; and (vii) any other information that is required by the FCC's accessibility complaint form.⁸⁵

The FCC will dismiss complaints that do not satisfy these pleading requirements without prejudice to re-file, and the FCC has not imposed a filing window or similar deadline on filing such complaints. Consumers are neither encouraged nor compelled to disclose the nature of their disability in an informal complaint, but are free to disclose if they so choose.

2. ANSWER REQUIREMENTS

Defendants (*i.e.*, covered entities) must file complete answers within **twenty days** of service of the complaint, unless the FCC or its staff specifies another time period. The answer must (i) respond specifically to each material allegation in the complaint and assert any defenses that the manufacturer or service provider claims; (ii) include a declaration by an officer of the manufacturer or service provider attesting to the truth of the facts asserted in the answer; (iii) set forth any remedial actions already taken or proposed alternative relief without any prejudice to any denials or defenses raised; (iv) provide any other information or materials specified by the FCC as relevant to its consideration of the complaint; and (v) be prepared or formatted in the manner requested by the FCC and the complainant, unless otherwise permitted by the FCC for good cause shown.⁸⁶ Answers need not include the names, titles, and responsibilities of each decision maker involved in the process by which a covered entity determined that the accessibility of a particular offering was not achievable; however, the FCC reserves the right to request such information.

If the covered entity's answer includes the defense that it was not achievable for the entity to make its product or service accessible, the covered entity must (i) set forth the steps taken by the covered entity to make the product or service accessible and usable; (ii) set forth the procedures and processes used by the covered entity to evaluate whether it was achievable to make the product or service accessible and usable in cases where the covered entity alleges it was not achievable to do so; (iii) set forth the covered entity's basis for determining that it was not achievable to make the product or service accessible and usable in cases where the manufacturer or service provider so alleges; and (iv) provide all documents supporting the covered entity's conclusion that it was not achievable to make the product or service accessible and usable in cases where the covered entity so alleges.⁸⁷

⁸⁵ 47 C.F.R. § 14.34(b).

⁸⁶ *Id.* § 14.36(b)(1).

⁸⁷ *Id.* § 14.36(b)(2).

In addition, the defendant must serve the complainant and the FCC with a non-confidential summary of the answer described above within **twenty days** of service of the complaint. The non-confidential summary must contain the essential elements of the answer, including, but not limited to, any asserted defenses to the complaint, must address the material elements of its answer, and include sufficient information to allow the complainant to file a reply, if the complainant chooses to do so.⁸⁸ The determination of what constitutes “sufficient information” will be case-specific and may also depend on the nature of the defendant’s answer.

3. REPLY REQUIREMENTS

The complainant may file a reply. The reply must (i) be served on the FCC and the defendant within ten days after service of the answer, unless otherwise directed by the FCC, and (ii) be responsive to matters contained in the answer and shall not contain new matters.

C. FORMAL COMPLAINT PROCESS

The filing of an informal complaint is not a prerequisite to filing a formal complaint.⁸⁹ In a formal complaint proceeding, both complainants and defendants are required to (i) certify in their respective complaints and answers that they attempted in good faith to settle the dispute before the complaint was filed; and (ii) submit detailed factual and legal support, accompanied by affidavits and documentation, for their respective positions in the initial complaint and answer. The FCC’s rules set forth detailed and exhaustive requirements for the formal complaint process.⁹⁰

D. INDEPENDENT FCC INVESTIGATION

The FCC also has the authority to commence an investigation of a covered entity on its own motion. Such an investigation may be launched based on information submitted anonymously to the FCC.

E. REMEDIES AND FORFEITURES

For a violation of the ACS rules (or a violation of section 255 or 718 or the associated implementing rules), the FCC may direct a manufacturer to bring the next generation of its equipment or device, and a service provider to bring its service, into compliance within a “reasonable time.” The FCC also may assess forfeitures of up to \$100,000 per violation for each day of a continuing violation, with the maximum amount

⁸⁸ *Id.* § 14.36(c).

⁸⁹ *Id.* § 14.33.

⁹⁰ *Id.* § 14.38 (applying the formal complaint processes set forth in subpart B of part 1 of the FCC’s rules to ACS formal complaints).

for a continuing violation set at \$1 million, indexed for inflation annually.⁹¹ In addition, damages may be available against common carriers.⁹² However, recovery of attorney fees is not available in either informal or formal complaint proceedings, regardless of whether the defendant is a common carrier.

XI. Accessible Mobile Browsers

Many of the accessible mobile browser rules mirror the ACS rules, even though the rules are a separate, additional requirement. For brevity, we refer back to descriptions in the ACS rule discussion above where these requirements overlap.

Effective Date. The accessible mobile browser rules became effective on **October 8, 2013**.

Covered Products. The accessible mobile browser rules apply to internet browsers included in mobile telephones used with “public mobile services,” such as a smartphone one would use with a wireless carrier.⁹³

Covered Companies. Both manufacturers of telephones that include an internet browser and providers of mobile services that arrange for the inclusion of a browser in phones to sell or distribute are subject to the accessible mobile browser rules.⁹⁴ Manufacturer has the same definition as in ACS rules (Section V.B).

Complying with Requirements. Covered companies must ensure that the functions of the included browser (including the ability to launch the browser) are accessible to and usable by individuals who are blind or have a visual impairment, unless doing so is not achievable.⁹⁵ A subset of the performance objectives in the ACS rules – those designed to address accessibility for individuals who are blind or visually impaired – are required by the accessible mobile browser rules. Specifically:

- First, input, control, and mechanical functions shall be locatable, identifiable, and operable in accordance with each of the following, assessed independently but subject to the “unless not achievable” standard:
 - **Operable without vision.** Provide at least one mode that does not require user vision.

⁹¹ 47 U.S.C. § 503(b)(2)(F). In 2024, these amounts were raised to a maximum of \$140,674 for each violation or each day of a continuing violation, with a maximum for any continuing violation of \$1,406,728 for any single act or failure to act. 47 CFR 1.80(b)(3).

⁹² See 47 C.F.R. § 14.40(a).

⁹³ *Id.* § 14.61.

⁹⁴ *Id.* § 14.60.

⁹⁵ “Achievable” has the same definition as in the ACS Rules (Section VII). 47 C.F.R. § 14.60(b)(2).

- Operable with low vision and limited or no hearing. Provide at least one mode that permits operation by users with visual acuity between 20/70 and 20/200, without relying on audio output.
- Operable with little or no color perception. Provide at least one mode that does not require user color perception.⁹⁶
- Second, that all information necessary to operate and use the product, including but not limited to, text, static or dynamic images, icons, labels, sounds, or incidental operating cues, must comply with each of the following, assessed independently but subject to the “unless not achievable” standard:
 - Availability of visual information. Provide visual information through at least one mode in auditory form.
 - Availability of visual information for low vision users. Provide visual information through at least one mode to users with visual acuity between 20/70 and 20/200 without relying on audio.
 - Access to moving text. Provide moving text in at least one static presentation mode at the option of the user.
 - Availability of audio cutoff. Where a product delivers audio output through an external speaker, provide an industry standard connector for headphones or personal listening devices (e.g., phone like handset or earcup) which cuts off the speaker(s) when used.⁹⁷
- Third, the browser must be “usable,” as that term is used in the ACS rules (Section VI.B.2).
- Fourth, covered companies may employ built-in or third-party solutions (Section VI.B.D).

In addition, the functions of an internet browser must be accessible to individuals with disabilities, unless doing so is not achievable. These functions include the ability to input a uniform resource locator (URL) into the address bar; to identify and activate home, back, forward, refresh, reload, and stop buttons; to view status information; and to activate zooming or other features that are used for ACS.⁹⁸

The accessible mobile browser rules also impose product design, development, and evaluation (Section VI.C); information, documentation, training, and customer support (Section VI.G.4); recordkeeping and certification (Section IX); and consumer complaints and enforcement (Section X) requirements that mirror those of the ACS rules. The rules do *not* impose an express compatibility requirement, but the compatibility requirement of the ACS rules would apply to the mobile phone to the extent it is used for ACS.

⁹⁶ 47 C.F.R. § 14.60(b)(5).

⁹⁷ *Id.*

⁹⁸ Second ACS Order ¶ 10.

Limitations on Liability. Covered companies are not required to make accessible or usable any Internet browser other than a browser that the company arranges to include in the telephone; or to make internet content, applications, or services accessible or usable (other than enabling individuals with disabilities to use an included browser to access such content, applications, or services).⁹⁹ Like the ACS rules, entities that merely provide transmission services or certain types of “information location tools” are exempt from liability for violations of the accessible mobile browser rules. However, unlike the ACS rules, the accessible mobile browser rules do not exempt any categories or types of mobile browsers products. The FCC may waive these rules, but has not done so to date.

XII. Conclusion

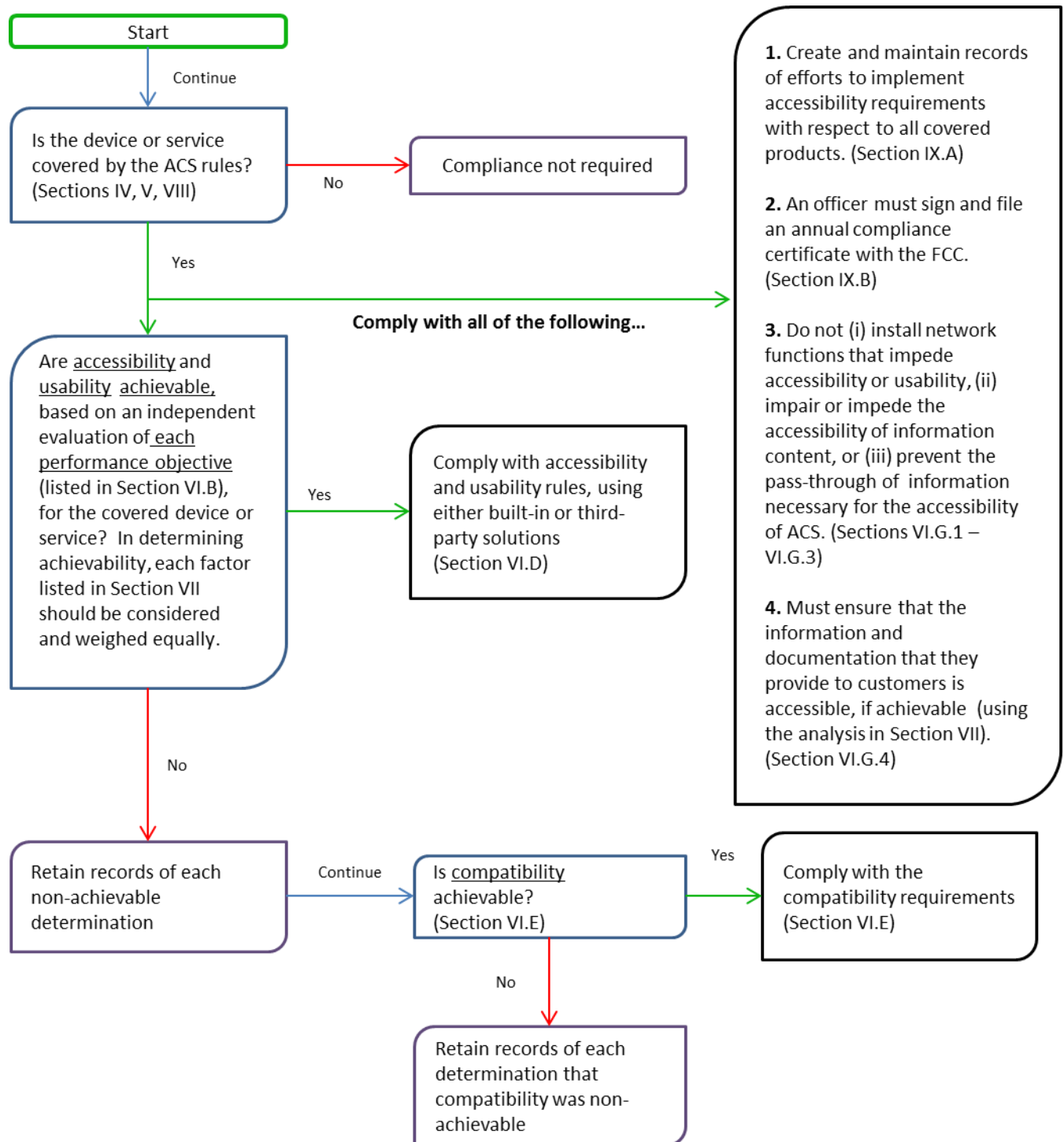
For questions on this manual, please contact David Grossman, CTA’s Vice President, Policy & Regulatory Affairs, at dgrossman@cta.tech, or Rachel Nemeth, CTA’s Senior Director, Regulatory Affairs, at rnemeth@cta.tech. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

⁹⁹ *Id.* § 14.61(a)(1)-(2).

[Appendix A: The ACS Rules - Effective Dates and Phase-In Periods](#)

<u>Effective Date</u>	<u>Requirement</u>
January 30, 2012	ACS Accessibility and Usability Rules, subject to phase-in until October 8, 2013.
January 30, 2013	Recordkeeping and Certification Requirements
April 1, 2013 and each year thereafter	Certification to be filed with the FCC, covering the prior year
October 8, 2013	Full Compliance by Covered Entities required; FCC Enforcement Rules take effect
October 8, 2015	Expiration of Class Waivers for IP-TVs, IP-DVPs, cable operator-leased set-top boxes, game consoles and game distribution and online game play services. Full Compliance with ACS Rules required for these products and services
December 31, 2017	Last day of temporary waiver of ACS rules for game software used for game play
December 20, 2018	Compliance date for manufacturers that opt to provide real-time text in covered devices, subject to the readily achievable or achievable limitations in Parts 6, 7 or 14, as applicable.
September 3, 2024	Compliance date for video conferencing services to comply with the ACS rules
October 3, 2024	Initial due date for IVCS manufacturers and providers to submit accessibility contact information and certifications of compliance with the ACS recordkeeping requirements (to the extent they have not filed in the database previously)
January 12, 2027	Compliance date for video conferencing services to comply with revised ACS rules adopted in the IVCS Second Report and Order

Appendix B: ACS Compliance Flowchart



This flowchart has been prepared for educational and information purposes only and is not intended as or a substitute for legal advice.



Consumer Technology Association, producer of CES®

FCC APPARATUS CLOSED CAPTIONING RULES Compliance Manual

Updated December 2024

Disclaimer: This manual is not intended or offered as legal advice. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Moreover, the content of this manual may not contain complete statements of the law. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

TABLE OF CONTENTS

I. Definitions	1
II. Introduction and Background	1
III. Effective Dates and Phase-In	3
IV. What Devices Are Covered?	3
<i>A. Apparatus Designed to Receive or Playback Video Programming</i>	<i>3</i>
1. Technically Feasible	4
2. “Designed”	4
3. Picture Screen; Screen Size Less Than 13 Inches – Only If Achievable	5
4. Removable Media Players	5
<i>B. Apparatus Designed to Record Video Programming</i>	<i>6</i>
V. What Closed Captioning Capabilities Are Required for Covered Devices?.....	6
<i>A. Functional Requirements.....</i>	<i>6</i>
<i>B. Interconnection Mechanisms – Video Outputs</i>	<i>8</i>
<i>C. Safe Harbor</i>	<i>9</i>
VI. Applying the “Achievable” Test – The Four Factors	9
<i>A. Nature and Cost of the Product</i>	<i>10</i>
<i>B. Technical and Economic Impact on the Covered Entity</i>	<i>11</i>
<i>C. Type of Operations</i>	<i>11</i>
<i>D. Extent of Accessible Offering.....</i>	<i>11</i>
VII. Exemptions, Waivers, and Alternate Means	12
<i>A. Exemptions.....</i>	<i>12</i>
1. Display Only Devices	12
2. Professional and Commercial Equipment	12
<i>B. Waivers</i>	<i>12</i>
1. Types of Waivers	12
2. Waivers Granted in the IP Captioning Recon. Order	12
<i>C. Alternate Means of Compliance.....</i>	<i>13</i>
VIII. Recordkeeping	13
IX. Complaint Procedures	14
X. Conclusion.....	14
Appendix A: Compliance Timeline for Apparatus	14

Appendix B – Captioning Functional Requirements.....	15
Appendix C – Conceptual ACC Compliance Flowchart	18

I. Definitions

The term *apparatus* means a physical device and the video players capable of displaying video programming transmitted simultaneously with sound that manufacturers install into the devices they manufacture before sale, whether in the form of hardware, software, or a combination of both, as well as any video players capable of displaying video programming transmitted simultaneously with sound that manufacturers direct consumers to install after sale.

The FCC's *Apparatus Closed Captioning Rules*, or ACC Rules, are set forth in 47 C.F.R. §§ 79.101 (analog television receivers), 79.102 (digital television receivers), 79.103 (digital apparatus designed to receive or play back video programming), 79.104 (apparatus designed to record video programming).

The term *removable media device* means devices that play video from removable media such as discs, and includes devices such as DVD and Blu-ray Disc™ players (Blu-ray players).

The term *video programming* means programming provided by, or generally considered comparable to programming provided by, a television broadcast station, but not including consumer-generated media.

The term *video programming distributor*, or VPD, means any person or entity that makes available directly to the end user video programming through a distribution method that uses Internet protocol.

II. Introduction and Background

This manual provides a guide to complying with the FCC's closed captioning rules applicable to end-user equipment (*i.e.*, "apparatus") designed to receive, playback, or record video programming, including such programming delivered via Internet protocol (IP). This manual refers to the FCC's closed captioning rules applicable to such end-user equipment as the "Apparatus Closed Captioning Rules," or "ACC Rules."¹⁰⁰ This manual focuses on the new ACC Rules that the FCC released on January 13, 2012 (in the "IP Captioning Order").¹⁰¹ In addition, the IP Captioning Order amended the existing ACC Rules applicable to analog television receivers¹⁰² and digital television receivers and converter boxes.¹⁰³ In a subsequent order released on June 14, 2013, the

¹⁰⁰ 47 C.F.R. §§ 79.100–79.104. The closed captioning rules are codified in Part 79 of the FCC rules. A copy of the current rules, including the specific rules referenced herein, is available at <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-C/part-79/subpart-B?toc=1>.

¹⁰¹ *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, Report and Order, 27 FCC Rcd 787 (2012) (IP Captioning Order), <https://docs.fcc.gov/public/attachments/FCC-12-9A1.pdf>.

¹⁰² 47 C.F.R. § 79.101.

¹⁰³ *Id.* § 79.102.

FCC clarified certain aspects of the ACC Rules and waived the ACC Rules for certain types of end-user equipment (in the “IP Captioning Recon. Order”).¹⁰⁴ Among other things, the IP Captioning Recon. Order also temporarily extended the compliance deadline for Blu-ray players and for DVD players that do not currently render or pass through captions, pending resolution of an accompanying Further Notice of Proposed Rulemaking (Further Notice).¹⁰⁵ In the 2024 Closed Captioning Display Settings Order, the FCC amended the ACC Rules with respect to user access to the captioning settings.¹⁰⁶ **Appendix C** provides a simplified conceptual flowchart for compliance with the ACC Rules.

The new and amended ACC Rules are designed to expand the scope of devices covered by the FCC’s closed captioning rules. Specifically, the ACC Rules ensure consumer electronics devices are able to display or pass through closed captions associated with video programming, including programming transmitted via IP. These rules implement section 203 of the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA). Section 203 amended several provisions of sections 303 and 330 of the Communications Act of 1934 (Communications Act).

Disclaimer/Relationships to Rules Governing Video Programming

Distributors: This manual focuses on the ACC Rules adopted pursuant to Section 203 of the CVAA. Thus, this manual **does not** cover the separate rules and obligations adopted in the IP Captioning Order or subsequent orders adopted pursuant to the CVAA or other grants of authority that apply to video programming distributors (VPDs) or owners.¹⁰⁷

¹⁰⁴ *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, Order on Reconsideration and Further Notice of Proposed Rulemaking, 28 FCC Rcd 8785 (2013), <https://docs.fcc.gov/public/attachments/FCC-13-84A1.pdf>. In this manual, paragraphs 5-31 of that item will be referred to as the “IP Captioning Recon. Order” and paragraphs 32-37 will be referred to as the “Further Notice.”

¹⁰⁵ *Id.*

¹⁰⁶ *Accessibility of User Interfaces, and Video Programming Guides and Menus*, Third Report and Order, MB. Docket No. 12-108 (rel. July 19, 2024), <https://docs.fcc.gov/public/attachments/FCC-24-79A1.pdf> (2024 Closed Captioning Display Settings Order).

¹⁰⁷ *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, Closed Captioning of Internet Protocol-Delivered Video Clips*, Second Order on Reconsideration and Second Further Notice of Proposed Rulemaking, 29 FCC Rcd 8687 (2014) <https://docs.fcc.gov/public/attachments/FCC-14-97A1.pdf>; *Closed Captioning of Video Programming; Telecommunications for the Deaf and Hard of Hearing, Inc., Petition for Rulemaking*, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 29 FCC Rcd 2221 (2014), <https://docs.fcc.gov/public/attachments/FCC-14-12A1.pdf> (implementing requirements to increase captioning quality); see also, 47 C.F.R. § 79.4(c). These VPD obligations include, **but are not limited to**, enabling the rendering or pass through of all required captions to the end user, maintaining the quality of the captions provided

III. Effective Dates and Phase-In

Appendix A contains a list of key dates. As clarified in the IP Captioning Recon. Order, the amended ACC Rules apply only to devices *manufactured* on or after **January 1, 2014**.¹⁰⁸ The new 2024 caption settings rules apply to devices manufactured after August 17, 2026.¹⁰⁹ However, the FCC expects manufacturers to take closed captioning accessibility into consideration as early as possible during the design process for covered apparatus.

IV. What Devices Are Covered?

A. APPARATUS DESIGNED TO RECEIVE OR PLAYBACK VIDEO PROGRAMMING

The new ACC Rules apply to all digital apparatus designed to receive or play back video programming transmitted simultaneously with sound, if such apparatus is manufactured in the United States or imported for use in the United States and uses a picture screen of any size, including devices such as smartphones, tablets, and personal computers.¹¹⁰ A covered apparatus includes the physical device and any video player capable of displaying video programming transmitted simultaneously with sound that the manufacturer includes with the device before sale, whether in the form of hardware, software, or a combination of both, as well as any video players that the manufacturer directs consumers to install after sale.¹¹¹ Video players that are subject to the rules include (i) proprietary video players that manufacturers embed in their devices, (ii) video players designed by third parties but installed by manufacturers in their

by the video programming owner and transmitting captions in a format reasonably designed to reach the end user in that quality and, for VPDs that provide applications, plug-ins, or devices in order to deliver video programming, complying with the requirements of Sections 79.103(c)-(d). See *id.* § 79.4(c)(2)(i).

¹⁰⁸ *Id.* §§ 79.101(a)(2), 79.102(a)(3), 79.103(a), 79.104(a); see IP Captioning Recon. Order, 28 FCC Rcd at 8798. As mentioned above and explained in Section IV.A.4 below, the IP Captioning Recon. Order temporarily extended the deadline for compliance with the ACC Rules for Blu-ray Disc™ players (Blu-ray players) and DVD players that do not render or pass through closed captions, pending resolution of the Further Notice.

¹⁰⁹ 47 CFR 79.103(e)(2) (applying the new caption settings rules to devices that use next generation operating systems deployed after FCC publishes a rule in the Federal Register establishing the compliance date for the rules). The FCC has not yet published the official compliance date, which will be the later of date is after the Office of Management and Budget has completed its review of any information collection requirements that the Media Bureau determines is required under the Paperwork Reduction Act or August 17, 2026. 47 CFR 79.103(e)(2) note.

¹¹⁰ 47 U.S.C. § 303(u)(a)(1); 47 C.F.R. § 79.103(a). Note that although digital television receivers and converter boxes qualify as covered digital apparatus under 47 C.F.R. § 79.103, a manufacturer of digital television receivers and/or converter boxes should also consult § 79.102, the rule specifically applicable to digital television receivers and converter boxes.

¹¹¹ *Id.* § 79.103(a). See IP Captioning Recon. Order, 28 FCC Rcd at 8789-90.

devices before sale, (iii) video players that manufacturers require consumers to add to devices after their sale in order to enable the device to play video, and (iv) video players that are part of operating systems used by devices, as well as any updates or upgrades to these video players.

Manufacturers should work together with VPDs as necessary to make sure that the manufacturers satisfy their obligations under the ACC Rules, especially if manufacturers include in their devices preloaded applications provided by VPDs by which consumers can view video programming.

In the case of applications that are downloaded and installed by the consumer without being required to do so by the device manufacturer, the manufacturer has no obligation to support the rendering of captions from the application other than to ensure the device does not block captions.¹¹²

If a VPD passes captioning text through to another component on a physical device over which the VPD has no control, then the manufacturer of that device has separate obligations (as discussed in this manual) to ensure the capability to display such captions under section 203 of the CVAA. If a VPD reasonably relies on the captioning display functionality in a device over which it has no control to display captions, the VPD has no liability to the extent that the captioning functionality on the device fails or operates improperly.¹¹³

1. TECHNICALLY FEASIBLE

The ACC Rules only apply to apparatus designed to receive or play back video programming to the extent the requirements are “technically feasible.”¹¹⁴ In order for a covered entity to demonstrate that compliance is not technically feasible, the entity must show that changes to the design of the apparatus to incorporate closed captioning capability are not physically or technically possible. As a general matter, if it is technically feasible to include a video player in the device, then it is technically feasible to include the required closed captioning functionality as well. A covered entity may assert that it was not technically feasible to implement closed captioning functionality as a defense to a complaint or, alternatively, may request an FCC determination regarding lack of technical feasibility.

2. “DESIGNED”

The FCC broadly interprets the term “designed” to include all apparatus *capable* of receiving or playing back video programming. More specifically, if a device is built

¹¹² See IP Captioning Order, 27 FCC Rcd at 841 & n.371. If a VPD is reasonably relying on the captioning display functionality in a device over which it has no control to display captions, the VPD has no liability to the extent that the captioning functionality on the device fails or operates improperly.

¹¹³ See *id.* at 805 & n.128.

¹¹⁴ See 47 C.F.R. §§ 79.101(a)(2), 79.102(a)(3), 79.103(a).

with a video player, the FCC will likely conclude that the device is “designed to receive or playback video programming,” and therefore, subject to the ACC Rules. However, the FCC will not hold manufacturers liable for failure to include closed captioning capability in devices manipulated or modified by consumers in the aftermarket to provide services not designed by the manufacturer.

3. PICTURE SCREEN; SCREEN SIZE LESS THAN 13 INCHES – ONLY IF ACHIEVABLE

Devices are subject to the FCC’s closed captioning rules if they are designed to use a picture screen even if the devices do not have an integrated picture screen. Devices such as set-top boxes and digital video recorders that are intended to receive or play back video programming for display on separate screens are subject to the rules.

The CVAA also broadened the applicability of the closed caption requirements by removing the statutory closed caption exclusion for television picture screens less than 13 inches in size.¹¹⁵ As a result, the closed caption requirements now apply to apparatus that use “a picture screen of *any* size.”¹¹⁶ However, for covered apparatus (including analog and digital television receivers) with a picture screen that is less than 13 inches in size, the ACC Rules are applicable only if “achievable,”¹¹⁷ as described in Section VI below. The FCC will evaluate achievability independently for each captioning functional requirement described in Section V.A below. In other words, a covered entity must assert and demonstrate non-achievability for each functional requirement that the given device is not meeting.¹¹⁸

4. REMOVABLE MEDIA PLAYERS

The ACC Rules also apply to all removable media devices, such as DVD and Blu-ray players, including such standalone devices that do not connect to the Internet or have a built-in television receiver. However, the IP Captioning Recon. Order temporarily extended the deadline for compliance with the ACC Rules for DVD players that do not render or pass through closed captions and for Blu-ray players, pending further instructions in the order that will resolve the Further Notice.¹¹⁹ The temporary extension applies only to the removable media playback function of a DVD or Blu-ray player, and it does not apply to any other function of a device that contains a DVD or Blu-ray

¹¹⁵ As a result, effective January 1, 2014, the FCC will remove the picture screen size limitation (*i.e.*, 13 inches or greater) from its current captioning rules applicable to analog and digital television receivers. See *id.* §§ 79.101(a)(2), 79.102(a)(3).

¹¹⁶ 47 U.S.C. § 303(u).

¹¹⁷ 47 C.F.R. § 79.103(b)(3).

¹¹⁸ For example, variable opacity for captions or the caption background may not be achievable on a given device, but the ability to change the caption color and the font size over an opaque or transparent background may be achievable, depending on the specific capabilities and characteristics of the given device’s screen and processing power.

¹¹⁹ See IP Captioning Further Notice, 28 FCC Rcd at 8796-97.

player.¹²⁰ In addition, the extension does not apply to DVD players that render closed captions or that are equipped with an analog output that passes through closed captions, because these DVD players comply with the ACC Rules.¹²¹ The temporary extension also does not apply to removable media players other than DVD and Blu-ray players. The FCC expects any new type of removable media player that is developed to be designed with closed captioning capability in mind, as required under the CVAA and the FCC's rules.¹²²

B. APPARATUS DESIGNED TO RECORD VIDEO PROGRAMMING

The ACC Rules also apply to end-user devices designed to record video programming transmitted simultaneously with sound. If "achievable,"¹²³ such devices must enable the rendering or the pass through of closed captions such that viewers are able to activate and de-activate the closed captions as the video programming is played back, consistent with the functional requirements described in Section V.A.¹²⁴ In addition, when devices such as DVD, Blu-ray, and other removable media recording devices are capable of recording video programming, they also qualify as recording devices and therefore must enable viewers to activate and de-activate the closed captions as video programming is played back.¹²⁵

V. What Closed Captioning Capabilities Are Required for Covered Devices?

A. FUNCTIONAL REQUIREMENTS

As a general matter, a manufacturer must ensure that its covered apparatus implement the captioning functionality summarized as follows:

- Presentation. The caption text must be able to be displayed within one or more separate caption windows and supporting the following modes: text that appears all at once (pop-on), text that scrolls up as new text appears (roll-up), and text where each new letter or word is displayed as it arrives (paint-on).
- Character color. Characters must be able to be displayed in the 64 colors defined in the CEA-708 standard and users must be provided the ability to override the

¹²⁰ For example, if a Blu-ray player also records video programming or receives or plays back IP-delivered video programming, then the extension would not apply to such non-removable media playback functions. See *id.* at n.52.

¹²¹ See *id.* at 8795.

¹²² See *id.* at 8797-98.

¹²³ The test for "achievable" is set forth in Section VI below.

¹²⁴ 47 C.F.R. § 79.104.

¹²⁵ If recording apparatus include preloaded applications from VPDs, the same limitations as discussed in Section IV.A above apply.

authored color for characters and select from a palette of at least eight specified basic colors.¹²⁶

- Character opacity. Users must be able to vary the opacity of captioned text and select between opaque and semi-transparent opacities.
- Character size. Users must be able to vary the size of captioned text, and the sizes available must range from 50% of the default character size to 200% of the default character size.
- Fonts. Apparatus must be able to implement the eight fonts required by CEA-708 and section 79.102(k) of the Commission's rules. Users must be able to assign the fonts included on their apparatus as the default font for each of the eight styles contained in § 79.102(k).
- Caption background color and opacity. The caption background must be able to be displayed in the 64 colors defined in CEA-708, and users must be provided the ability to override the authored color for the caption background and select from a palette of at least the eight basic colors. All apparatus must implement captioning such that users can vary the opacity of the caption background.
- Character edge attributes. Character edge attributes may be displayed, and users must be able to select character edge attributes including: no edge attribute, raised edges, depressed edges, uniform edges, and drop shadowed edges.
- Caption window color. The caption window color must be able to be displayed in the 64 colors defined in CEA-708, and users must be provided with the ability to override the authored color for the caption window and select from a palette of at least the eight basic colors. Users must be provided the ability to vary the opacity of the caption window.
- Language. Apparatus must be able to select between caption tracks in additional languages when such tracks are present and allow the user to select simplified or reduced captions when such captions are available and identify such a caption track as "easy reader."
- Preview and setting retention. The user must be able to preview default and user selection of the caption features required by this section, and apparatus must retain such settings as the default caption configuration until changed by the user.¹²⁷

¹²⁶ The basic colors referred to in this section are white, black, red, green, blue, yellow, magenta, and cyan.

¹²⁷ 47 C.F.R. § 79.103(c)(1)-(10). The full text of the functional requirements is provided as **Appendix B**.

B. ACCESS TO CAPTION SETTINGS

Manufacturers (as well as multichannel video programming distributors or “MVPDs”) must ensure that consumers may readily access user display settings for closed captioning on covered apparatus. Unlike other ACC rules, the legal responsibility for compliance with access to caption settings rule for third-party, pre-installed applications does not extend to manufacturers of the devices themselves.¹²⁸ The FCC uses a four-factor-based approach to determining whether closed captioning display settings are readily accessible:

- Proximity. Are the closed captioning display settings available in one area of the settings that is accessed via a means reasonably comparable to a button, key, or icon?
- Discoverability. Does the user have the ability to easily find the closed captioning display settings? To ensure settings are discoverable, covered manufacturers and MVPDs must:
 - Conduct usability testing to determine if caption display settings can be easily found by working with consumers and disability groups as part of the testing process;
 - Make good faith efforts to correct problems identified during the consumer testing process; and
 - Train customer-facing employees on how to advise customers with regard to caption display settings.
- Previewability. Are viewers able to preview the appearance of closed captions on programming on their screen while changing the closed captioning display settings (i.e., without exiting the programming)?¹²⁹
- Consistency and persistence. Covered entities must ensure that apparatus they manufacture make closed caption settings available to applications via an API or similar method. MVPDs also have specific requirements with respect to the devices and apps they offer.¹³⁰

¹²⁸ 47 CFR 79.103(e).

¹²⁹ 2024 Closed Captioning Display Settings Order ¶ 27. The caption preview may include stock text or caption previews, rather than the captions carried on the specific program. *Id.*

¹³⁰ Specifically, MVPD navigation devices, a category of apparatus, must expose closed caption display settings via an API or similar method that an over-the-top application provider can use upon launch of their application on the device. The API or similar method must enable the application provider to use the device-level caption settings for its own content, if it chooses, and covered entities must notify application developers about this API or similar method through any reasonable means. An MVPD’s video app hosted must utilize the operating system-level closed caption settings of the apparatus upon launch of the application on the device.

C. INTERCONNECTION MECHANISMS – VIDEO OUTPUTS

Interconnection mechanisms (e.g., HDMI) must be able “to carry from the source device to the consumer equipment the information necessary to permit or render the display of closed captions.”¹³¹ The FCC, therefore, requires that all video outputs on covered devices be capable of conveying from the source device to the consumer equipment the information necessary to *permit or render* the display of closed captions.¹³² It is sufficient for a video output to transmit captions in an “open” manner. When transmitted in an “open” manner, such as is the case with HDMI, the captions are “rendered” by the source device, embedded (decoded and mixed) into the video stream, then carried by the HDMI connector to the receiving device in a manner that does not support the use of the captioning decoding and rendering functionality of the receiving device. In addition, to address consumer frustration in accessing closed captions on certain devices, the FCC made clear that *all* apparatus, including set-top boxes, are subject to the functional requirements described above.

As described in Section IV.A.4 above, the IP Captioning Recon. Order finds that DVD players that pass through closed captions using an analog output comply with the ACC Rules. In addition, the IP Captioning Recon. Order waives the interconnection mechanism rule for DVD players that do not render closed captions but pass through closed captions via an analog output and that also include other outputs (e.g., digital or high-definition analog outputs) without this pass-through capability.¹³³ Therefore, DVD players that are capable only of passing through closed captions via an analog output are compliant with the ACC Rules, even if they also have other output types. Absent this waiver, the digital and HD analog outputs on such DVD players would violate the interconnection mechanism rule unless the DVD player itself rendered the captions.

D. SAFE HARBOR

The IP Captioning Order adopts the Society of Motion Picture and Television Engineers Timed Text format (SMPTE ST 2052-1:2010: “Timed Text Format (SMPTE-TT)” 2010) as a “safe harbor” interchange and delivery format. Covered devices that implement SMPTE-TT will be deemed in compliance with the ACC Rules, specifically the functional requirements described above.¹³⁴ A covered entity is not required to request permission from the FCC to use a different standard; however, where use of an alternate standard results in noncompliant captions, the covered entity will be held responsible for violating the ACC Rules.

VI. Applying the “Achievable” Test – The Four Factors

A covered entity must ensure that its apparatus that are (i) designed to receive or playback video programming that use a picture screen of less than 13 inches in size or

¹³¹ 47 U.S.C. § 303(z)(2).

¹³² 47 C.F.R. § 79.103(d).

¹³³ See IP Captioning Recon. Order, 28 FCC Rcd at 8795-96 & n.69.

¹³⁴ 47 C.F.R. § 79.103(c)(11).

(ii) designed to record video programming are compliant with the ACC Rules, **unless not achievable**.¹³⁵ “Achievable” means “with reasonable effort or expense.”¹³⁶ The CVAA defines four factors that the FCC will consider in an enforcement proceeding against a covered entity regarding whether each functional requirement was, in fact, achievable. The FCC is limited to consideration of only those four factors in determining “achievability.” In internal decision-making, covered entities should consider these factors as well. Then, if the FCC investigates an entity’s captioning compliance or if an entity is the subject of an informal or formal complaint, the process of demonstrating a reasonable achievability analysis will be simplified. An achievability determination must be limited to these four factors, and each factor is to be weighed equally.

The FCC presumes that a covered entity is able to comply with the ACC Rules, unless it can prove otherwise. Therefore, if a covered entity fails to keep adequate records explaining why it did or did not comply with the rules – that is, its decisions regarding what functional requirements are “achievable” – it risks potentially large fines. In sum, the covered entity bears the burden of proof in showing why it deemed that complying with one or more functional requirements was not achievable.

A. NATURE AND COST OF THE PRODUCT

The FCC will weigh “the nature and cost of the steps needed to meet the [captioning] requirements with respect to the specific equipment . . . in question.”¹³⁷

The FCC recognizes that if an accessibility feature “fundamentally alters” a product, then it is “not achievable” to include that feature in that product. A “fundamental alteration” means to reduce substantially the functionality of the product, to render some features inoperable, to impede substantially or deter use of the product by individuals without the specific disability the feature is designed to address, or to alter substantially and materially the shape, size or weight of the product.

Since all accessibility enhancements, including captioning functionality, in one sense require an alteration to the design of a product, not all changes to a product will be considered fundamental alterations. Rather, the alteration to the product must be fundamental for the accessibility feature to be considered *per se* not achievable. The “not achievable because of a fundamental alteration” standard is difficult to satisfy, so covered entities must be prepared to defend their decision-making.

One important criterion the FCC will evaluate under this factor is whether a captioning functional requirement has been implemented for competing products or services. If the functional requirement has been implemented by a competitor or other manufacturer, then it is more likely that implementation of the requirement is achievable. Therefore, a covered entity should consider competing products, and, if those same requirements cannot be implemented in the covered entity’s product, the covered entity

¹³⁵ See 47 U.S.C. §§ 303(u)(2)(A), 303(z)(1).

¹³⁶ *Id.* § 617(g).

¹³⁷ *Id.* § 617(g)(1).

should be prepared to explain why. However, a covered entity may rebut evidence provided by competing products by demonstrating that the circumstances of the product offered by that particular entity renders the requirement not achievable.

Please note that, for purposes of this factor, a covered entity cannot rely on a comparison of the cost of compliance to the overall production cost of the product.

B. TECHNICAL AND ECONOMIC IMPACT ON THE COVERED ENTITY

The FCC recognizes that a covered entity may not have the resources to incorporate captioning into its product and further recognizes that the inclusion of the functional requirements may have a greater impact on a small entity than a larger one. The covered entity must consider “the technical and economic impact on the operation of the manufacturer . . . and on the operation of the specific equipment . . . in question, including on the development and deployment of new communications technologies.”¹³⁸ The FCC will weigh both the costs of making a product accessible and an entity’s total gross revenues. In contrast to the first factor, the covered entity may appropriately consider the cost of compliance in comparison to the overall cost of producing a product when evaluating this factor.

C. TYPE OF OPERATIONS

The FCC will weigh the covered entity’s experience in manufacturing covered devices; therefore, the covered entity must consider its operations as a manufacturer and/or service provider when making an achievability determination.¹³⁹ The covered entity’s experience in the various information technology markets is relevant to the determination of this factor. In addition, the entity’s size, resources, business models, technology configurations, and platforms are also relevant factors. However, the fact that a covered entity has substantial financial resources does not, by itself, trigger a finding of achievability.

D. EXTENT OF ACCESSIBLE OFFERING

Finally, the FCC will weigh “the extent to which the service provider or manufacturer in question offers accessible services or equipment containing varying degrees of functionality and features, and offered at differing price points.”¹⁴⁰

Covered entities should generally consider what is achievable with respect to each and every product for which the achievable limitation applies, to ensure the entity offers consumers with meaningful choices through a range of products with varying degrees of functionality and features, at differing price points. If a line of products

¹³⁸ *Id.* § 617(g)(2).

¹³⁹ *Id.* § 617(g)(3).

¹⁴⁰ *Id.* § 617(g)(4).

includes low-end products, then it is just as important that low-end products have captioning capability as the high-end products, if achievable.

VII. Exemptions, Waivers, and Alternate Means

A. EXEMPTIONS

1. DISPLAY ONLY DEVICES

Apparatus that are display-only video monitors with no playback capability are not required to comply with the ACC Rules.¹⁴¹ To the extent that there is ambiguity as to whether the exemption applies to a particular device, a manufacturer may request a determination from the FCC as to whether the device qualifies for the exemption.

2. PROFESSIONAL AND COMMERCIAL EQUIPMENT

Commercial video equipment, including professional movie theater projectors, and similar types of professional equipment, are not required to comply with the ACC Rules.¹⁴² However, other federal laws may impose accessibility obligations to ensure professional or commercial equipment are accessible to employees with disabilities, or enable the delivery of accessible services to the public.

B. WAIVERS

1. TYPES OF WAIVERS

The FCC may waive the ACC Rules for any apparatus or class of apparatus that is primarily designed for activities other than receiving or playing back video programming, or for equipment designed for multiple purposes and capable of receiving or playing back video programming, but whose essential utility is derived from other purposes.¹⁴³ Waiver requests will likely be highly fact-specific and unique to each device presented. Accordingly, the FCC will address waiver requests on a case-by-case basis.¹⁴⁴

2. WAIVERS GRANTED IN THE IP CAPTIONING RECON. ORDER

In the IP Captioning Recon. Order, the FCC permanently waived the ACC Rules for certain “narrow classes” of devices that are capable of displaying video programming but that are primarily designed for activities other than receiving or playing back video programming. These classes are:

¹⁴¹ 47 C.F.R. § 79.103(b)(1).

¹⁴² *Id.* § 79.103(b)(2).

¹⁴³ *Id.* § 79.103(b)(4).

¹⁴⁴ In the IP Captioning Order, the FCC rejected waiver requests to exempt: (1) all mobile devices; (2) all smartphones; and (3) game consoles, cellular telephones, and tablets.

- Devices that are primarily designed to capture and display still and/or moving images consisting of consumer-generated media, or of other images that are not “video programming” as defined in Section I, and that have limited capability to display video programming transmitted simultaneously with sound. This includes devices such as digital still cameras, digital video cameras, baby monitors, security cameras, digital video camera microscopes, digital playback binoculars, and digital probes for viewing and playing video of enclosed spaces; and
- Devices that are primarily designed to display still images and that have limited capability to display video programming transmitted simultaneously with sound. This includes devices such as digital picture frames, *except* those that are primarily designed to display still photographs *and* video.¹⁴⁵

C. ALTERNATE MEANS OF COMPLIANCE

A covered entity may meet all of the requirements of the ACC Rules via “alternate means.”¹⁴⁶ If an entity wishes to use an “alternate means” to comply with the applicable requirements, the entity may either (i) request an FCC determination that the proposed alternate means satisfies the statutory requirements through an informal request for FCC action,¹⁴⁷ or (ii) claim in defense to a complaint or enforcement action that the FCC should determine that the entity’s approach to satisfying the statutory requirements was a permissible alternate means of compliance.

VIII. Recordkeeping

Covered entities whose products do not meet all of the functional requirements and claim as a defense that it is not “achievable” for them to do so must be prepared to produce sufficient records regarding their consideration of the four achievability factors, discussed above.

- The nature and cost of the steps needed to meet the functional requirements with respect to the specific equipment in question;
- The technical and economic impact on the operation of the covered entity and on the operation of the specific equipment in question, including on the development and deployment of new communications technologies;
- The type of operations of the covered entity; and

¹⁴⁵ See IP Captioning Recon. Order, 28 FCC Rcd at 8792. If it is unclear whether a particular device qualifies for one of these two class waivers, or if the manufacturer seeks a waiver pursuant to a separate provision of the CVAA that authorizes waivers for multi-purpose devices whose essential utility is derived from purposes other than receiving or playing video programming, then the device manufacturer may file an apparatus-specific waiver request. See *id.*

¹⁴⁶ 47 U.S.C. § 303 note.

¹⁴⁷ See 47 C.F.R. § 1.41 (informal requests for FCC action).

- The extent to which the covered entity offers equipment containing varying degrees of functionality and features, and offered at differing price points.

Failure to provide sufficient explanation and supporting evidence will result in an FCC decision against the covered entity and in favor of the complaining party.

IX. Complaint Procedures

Written complaints alleging non-compliance of covered devices with the ACC Rules may be filed with the FCC. The FCC may forward such complaints to the named manufacturer or device provider, as well as any other entity that the FCC determines may be involved, and may request additional information from any relevant party to investigate and adjudicate potential violations.

The complaint should include the following information: (i) the name, postal address, and other contact information of the complainant, such as telephone number or email address; (ii) the name and contact information, such as postal address, of the apparatus manufacturer or provider; (iii) information sufficient to identify the software or device used to view or to attempt to view video programming with closed captions; (iv) the date or dates on which the complainant purchased, acquired, or used, or tried to purchase, acquire, or use the apparatus to view closed captioned video programming; (v) a statement of facts sufficient to show that the manufacturer or provider has violated or is violating the FCC's rules; (vi) the specific relief or satisfaction sought by the complainant; and (vii) the complainant's preferred format or method of response to the complaint.

X. Conclusion

For questions on this manual, please contact David Grossman, CTA's Vice President, Policy & Regulatory Affairs, at dgrossman@cta.tech, or Rachel Nemeth, CTA's Senior Director, Regulatory Affairs, at rnemeth@cta.tech. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

Appendix A: Compliance Timeline for Apparatus

Date	Description
January 13, 2012	FCC releases IP Captioning Order
March 30, 2012	IP Captioning Order published in Federal Register
April 30, 2012	Closed captioning rules, including the ACC Rules set forth in the IP Captioning Order generally become effective (some provisions require approval by the U.S. Office of Management and Budget)
June 14, 2013	FCC releases IP Captioning Recon. Order
July 2, 2013	IP Captioning Recon. Order published in Federal Register
August 1, 2013	Amendments to ACC Rules, as set forth in the IP Captioning Recon. Order, become effective
January 1, 2014	Full compliance with the new and amended ACC Rules required (this deadline applies to devices based on their date of manufacture)
August 17, 2026	Likely ¹⁴⁸ compliance date for closed captioning display settings rules
TBD	End of temporary waiver for DVD players that do not render or pass through closed captions and Blu-ray players (upon resolution of the FCC's Further Notice)

¹⁴⁸ The exact compliance date will be after the Office of Management and Budget (OMB) has completed its review of any information collection requirements that the Media Bureau determines is required under the Paperwork Reduction Act or August 17, 2026, whichever is later. It is a near certainty that OMB review will conclude prior to August 17, 2026.

Appendix B – Captioning Functional Requirements

(47 C.F.R. § 79.103(c), in pertinent part)

Specific technical capabilities. All apparatus subject to this section shall implement the following captioning functionality:

(1) *Presentation.* All apparatus shall implement captioning such that the caption text may be displayed within one or separate caption windows and supporting the following modes: text that appears all at once (pop-on), text that scrolls up as new text appears (roll-up), and text where each new letter or word is displayed as it arrives (paint-on).

(2) *Character color.* All apparatus shall implement captioning such that characters may be displayed in the 64 colors defined in CEA-708 and such that users are provided with the ability to override the authored color for characters and select from a palette of at least 8 colors including: white, black, red, green, blue, yellow, magenta, and cyan.

(3) *Character opacity.* All apparatus shall implement captioning such that users are provided with the ability to vary the opacity of captioned text and select between opaque and semi-transparent opacities.

(4) *Character size.* All apparatus shall implement captioning such that users are provided with the ability to vary the size of captioned text and shall provide a range of such sizes from 50% of the default character size to 200% of the default character size.

(5) *Fonts.* All apparatus shall implement captioning such that fonts are available to implement the eight fonts required by CEA-708 and § 79.102(k). Users must be provided with the ability to assign the fonts included on their apparatus as the default font for each of the eight styles contained in § 79.102(k).

(6) *Caption background color and opacity.* All apparatus shall implement captioning such that the caption background may be displayed in the 64 colors defined in CEA-708 and such that users are provided with the ability to override the authored color for the caption background and select from a palette of at least 8 colors including: white, black, red, green, blue, yellow, magenta, and cyan. All apparatus shall implement captioning such that users are provided with the ability to vary the opacity of the caption background and select between opaque, semi-transparent, and transparent background opacities.

(7) *Character edge attributes.* All apparatus shall implement captioning such that character edge attributes may be displayed and users are provided the ability to select character edge attributes including: no edge attribute, raised edges, depressed edges, uniform edges, and drop shadowed edges.

(8) *Caption window color.* All apparatus shall implement captioning such that the caption window color may be displayed in the 64 colors defined in CEA-708 and such that users are provided with the ability to override the authored color for the caption window and select from a palette of at least 8 colors including: white, black, red, green, blue, yellow, magenta, and cyan. All apparatus shall implement captioning such that users are provided with the ability to vary the opacity of the caption window and select between opaque, semi-transparent, and transparent background opacities.

(9) *Language.* All apparatus must implement the ability to select between caption tracks in additional languages when such tracks are present and provide the ability for the user to select simplified or reduced captions when such captions are available and identify such a caption track as “easy reader.”

(10) *Preview and setting retention.* All apparatus must provide the ability for the user to preview default and user selection of the caption features required by this section, and must retain such settings as the default caption configuration until changed by the user.

(47 C.F.R. § 79.103(e))

Access to closed captioning display settings. Manufacturers of apparatus subject to . . . this section and multichannel video programming distributors must ensure that consumers are able to readily access user display settings for closed captioning on apparatus designed to receive or play back video programming transmitted simultaneously with sound, if such apparatus is manufactured in the United States or imported for use in the United States and uses a picture screen of any size, if technically feasible, except that the requirement does not apply to third-party, pre-installed applications, and for apparatus that use a picture screen of less than 13 inches in size the requirement is mandated only if doing so is achievable as defined in this section.

(1) In determining whether closed captioning display settings are readily accessible, the Commission will require compliance with the following factors:

(i) Proximity. This factor considers whether the closed captioning display settings are available in one area of the settings that is accessed via a means reasonably comparable to a button, key, or icon.

(ii) Discoverability. This factor considers whether the user has the ability to easily find the closed captioning display settings. To ensure settings are discoverable, manufacturers of apparatus subject to paragraph (a) of this section and multichannel video programming distributors are required to:

(A) Conduct usability testing to determine if caption display settings can be easily found by working with consumers and disability groups as part of the testing process;

(B) Make good faith efforts to correct problems identified during the consumer testing process; and

(C) Train customer-facing employees on how to advise customers with regard to caption display settings.

(iii) Previewability. This factor considers whether viewers are able to preview the appearance of closed captions on programming on their screen while changing the closed captioning display settings.

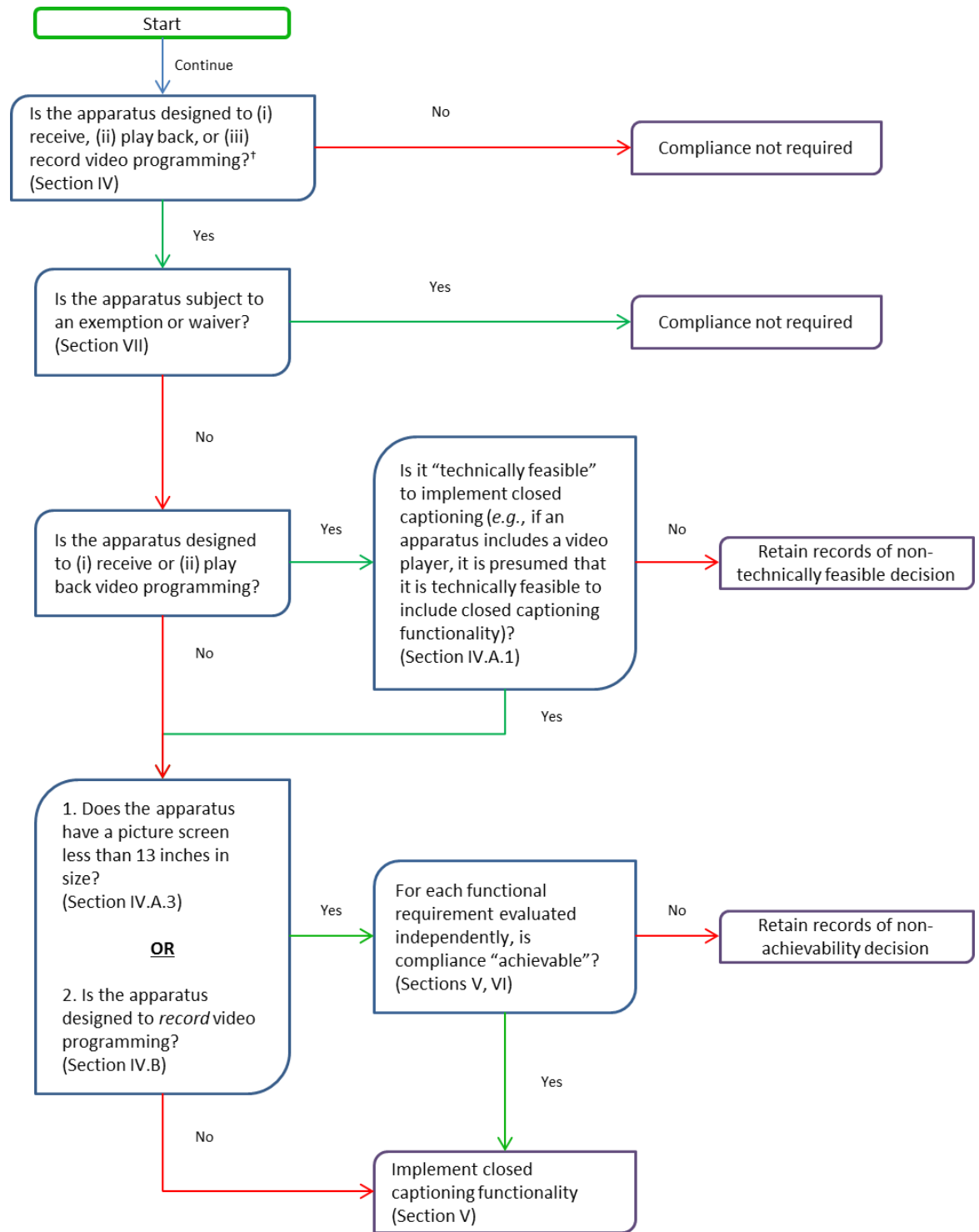
(iv) Consistency and persistence. This factor requires covered entities to:

(A) With regard to an MVPD's provision of navigation devices, expose closed caption display settings via an application programming interface (API) or similar method that an over-the-top application provider can use upon launch of their application on the device. The API or similar method must enable the application provider to use the device-level caption settings for its own content, if it chooses, and covered entities must notify application developers about this API or similar method through any reasonable means;

(B) With regard to providing an MVPD's own video programming application hosted on third-party devices, utilize the operating system-level closed caption settings of the apparatus upon launch of the application on the device; and

(C) Ensure that apparatus they manufacture make closed caption settings available to applications via an API or similar method.

Appendix C – Conceptual ACC Compliance Flowchart*



* This flowchart has been prepared for educational and information purposes only and is not intended as, or a substitute for, legal advice.

† As discussed in Section IV.A above, if a device is built with a video player, the FCC will likely conclude that the device is "designed to receive or playback video programming," and, absent a waiver, is subject to the ACC Rules. The FCC broadly interprets the term "designed" to include all apparatus capable of receiving or playing back video.



Consumer Technology Association, producer of CES®

User Interface Accessibility Compliance Manual

Updated December 2023

Disclaimer: This manual is not intended or offered as legal advice. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Moreover, the content of this manual may not contain complete statements of the law. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

TABLE OF CONTENTS

I. Definitions	2
II. Introduction and Background	3
III. Effective Dates and Phase-In	4
IV. What Devices Are Covered?	5
V. What Are the Accessibility Requirements for Digital Apparatus?	5
<i>A. Which Functions of Digital Apparatus Must Be Accessible to the Blind and Visually Impaired?</i>	<i>6</i>
<i>B. What Do “Accessible” and “Usable” Mean?</i>	<i>7</i>
<i>C. Digital Apparatus with Built-in Closed Captioning or Video Description Capability: Activation Mechanisms</i>	<i>8</i>
<i>D. Information, Documentation, Training, and Notification Requirements</i>	<i>9</i>
VI. What Are the Accessibility Requirements for Navigation Devices?	9
<i>A. Which Functions of Navigation Devices Must Be Accessible to the Blind and Visually Impaired?</i>	<i>10</i>
<i>B. Navigation Devices with Built-in Closed Captioning Capability: Activation Mechanism</i>	<i>11</i>
<i>C. How Do Manufactures Provide Accessible Menus and Guides “Upon Request”?</i>	<i>12</i>
1. Using Separate Equipment or Software	13
2. Verifying Eligibility	13
<i>D. Information, Documentation, Training, and Notification Requirements</i>	<i>14</i>
VII. Applying the “Achievable” Test – The Four Factors	14
<i>A. Nature and Cost of the Product</i>	<i>15</i>
<i>B. Technical and Economic Impact on the Covered Entity</i>	<i>16</i>
<i>C. Type of Operations</i>	<i>16</i>
<i>D. Extent of Accessible Offerings</i>	<i>16</i>
VIII. Exclusions and Alternate Means	17
<i>A. Exclusions</i>	<i>17</i>
1. Professional and Commercial Equipment	17
2. Public Safety and Enterprise Equipment	17
3. Broadband Equipment	17
<i>B. Alternate Means of Compliance</i>	<i>17</i>

IX. Recordkeeping	17
X. Complaint Procedures	18
XI. Conclusion.....	19
Appendix A: Compliance Timeline for Covered Devices	20
Appendix B – Appropriate built-in apparatus functions	21
Appendix C – Navigation Device Functions Covered by the Accessibility Requirements	22

I. Definitions

The term *accessible* is defined in Section V.B.

The term *achievable* means with reasonable effort or expense, as determined by the FCC. In making such a determination, the FCC shall consider: (i) the nature and cost of the steps needed to meet the requirements of section 303(aa)–(bb) of the Communications Act of 1934 and the FCC’s implementing rules with respect to the specific equipment or service in question; (ii) the technical and economic impact on the operation of the manufacturer or provider and on the operation of the specific equipment or service in question, including on the development and deployment of new communications technologies; (iii) the type of operations of the manufacturer or provider; and (iv) the extent to which the service provider or manufacturer in question offers accessible services or equipment containing varying degrees of functionality and features, and offered at differing price points.

The term *conditional access* means a mechanism that provides for selective access and denial of specific services and makes use of signal security (e.g., encryption) that can prevent a signal from being received except by authorized users.

The term *digital apparatus* means a physical device and the video players capable of displaying video programming transmitted simultaneously with sound that manufacturers install into the devices they manufacture before sale, whether in the form of hardware, software (including third-party applications), or a combination of both, as well as any video players capable of displaying video programming transmitted simultaneously with sound that manufacturers direct consumers to install after sale, excluding navigation devices. Examples of digital apparatus are televisions and computers without CableCARD or other conditional access technology, mobile devices (such as tablets and smartphones) without MVPD apps (as defined below) pre-installed by the manufacturer, and removable media players.

The term *multichannel video programming distributor* or *MVPD* means any person or entity — for example, a cable operator or a direct broadcast satellite service — that owns or operates a multichannel video programming system.

The term *multichannel video programming system* means a distribution system that makes available for purchase, by customers or subscribers, multiple channels of video programming, such as a cable television system or a direct broadcast satellite or other system for providing direct-to-home multichannel video programming via satellite.

The term *MVPD app* means an application that performs conditional access so that a consumer can access multichannel video programming or other services offered by an MVPD.

The term *navigation device* means a device that is manufactured with a CableCARD slot, CableCARD’s successor technology, or other conditional access capabilities, including devices such as digital cable-ready televisions (i.e., televisions

with CableCARD slots), set-top boxes (including those provided by MVPDs as well as consumer-owned CableCARD-ready devices), computers with CableCARD slots, devices with MVPD applications that are installed by the device manufacturer, and cable modems.

The FCC's *User Interface Accessibility Rules*, or UI Rules, are set forth in 47 C.F.R. §§ 79.107 (user interfaces provided by digital apparatus), 79.108 (video programming guides and menus provided by navigation devices), 79.109 (activating accessibility features), 79.110 (complaint procedures).

The term *removable media player* means a device that plays video from removable media such as discs, and includes devices such as DVD and Blu-ray Disc™ players ("Blu-ray players").

The term *usable* is defined in Section V.B.

The term *video programming* means programming provided by, or generally considered comparable to programming provided by, a television broadcast station, but not including consumer-generated media.

II. Introduction and Background

This manual provides a guide to complying with the FCC's rules requiring the accessibility of user interfaces on video-capable devices. This manual refers to these rules collectively as the "User Interface Accessibility Rules," or "UI Rules."¹⁴⁹ The UI Rules are intended to (1) enable consumers who are blind or visually impaired to more easily access video programming on a range of video devices; and (2) enable consumers who are deaf or hard of hearing to more easily activate closed captioning on video devices. The rules apply to:

- Companies that manufacture devices with integrated video players;
- Companies that manufacture devices with built-in conditional access capabilities that enable users to access multichannel video programming and other services offered by multichannel video programming distributors (MVPDs); and
- MVPDs that lease or sell devices with built-in conditional access capabilities.

The FCC adopted the User Interface Accessibility Rules in an order released on October 31, 2013 (the "User Interface Accessibility Order").¹⁵⁰ The FCC adopted further

¹⁴⁹ 47 C.F.R. §§ 79.107–79.110. The User Interface Accessibility Rules are codified in Part 79 of the FCC's rules. A copy of the current rules, including the specific rules referenced herein, is available at <https://www.ecfr.gov/current/title-47/chapter-I/subchapter-C/part-79/subpart-B>.

¹⁵⁰ *Accessibility of User Interfaces, and Video Programming Guides and Menus*, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 17330 (2013) (User Interface Accessibility Order), <https://docs.fcc.gov/public/attachments/FCC-13-138A1.pdf>.

rules and clarifications on November 18, 2015 (Second UI Accessibility Order).¹⁵¹ The rules implement sections 204 and 205 of the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), which amended several provisions of sections 303 and 330 of the Communications Act of 1934 (Communications Act).

Disclaimer/Relationship to Requirements that Apply to MVPDs: This manual focuses on the UI Rules as they apply to manufacturers of digital apparatus and navigation devices. Thus, this manual **does not** cover the distinct obligations that the UI Rules impose on MVPDs.¹⁵²

III. Effective Dates and Phase-In

The UI Rules apply to devices *manufactured* on or after **December 20, 2016**, except as noted below.¹⁵³ However, the FCC expects manufacturers to take accessibility into consideration as early as possible during the design process for new and existing equipment.

The following classes of equipment must comply with the UI Rules if manufactured on or after **December 20, 2021**:

- Display-only monitors and video projectors;
- Devices that are primarily designed to capture and display still and/or moving images consisting of consumer-generated media, or of other images that are not “video programming” as defined in Section I, and that have limited capability to display video programming transmitted simultaneously with sound. This includes devices such as digital still cameras, digital video cameras, baby monitors, security cameras, digital video camera microscopes, digital playback binoculars, and digital probes for viewing and playing video of enclosed spaces; and
- Devices that are primarily designed to display still images and that have limited capability to display video programming transmitted simultaneously with sound. This includes devices such as digital picture frames, *except* those that are primarily designed to display still photographs *and* video.¹⁵⁴

Appendix A contains a list of key dates.

¹⁵¹ *Accessibility of User Interfaces, and Video Programming Guides and Menus*, Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 13914 (2015) (Second UI Accessibility Order), https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-156A1_Rcd.pdf.

¹⁵² See, e.g., 47 C.F.R. § 79.108.

¹⁵³ *Id.* §§ 79.107(a)(1) note 2, (b), 79.108(a)(1) note 1, (b), 79.109(a) note 2, (b) note 2, (c); see User Interface Accessibility Order, 28 FCC Rcd at 17399–401.

¹⁵⁴ 47 C.F.R. §§ 79.107(a)(1) note 2, (b); see User Interface Accessibility Order, 28 FCC Rcd at 17351–53, 17399–401.

IV. What Devices Are Covered?

The UI Rules divide video devices into two categories subject to different requirements: (1) “digital apparatus,” defined as a physical device and the video player(s)¹⁵⁵ the manufacturer installs on the device before sale or directs consumers to install; and (2) “navigation device,” defined as a device manufactured with a CableCARD slot, CableCARD’s successor technology, or other conditional access capabilities.¹⁵⁶ A device either falls into one category or the other, but not both.

To determine which category a device falls into, look to its built-in functionality at the time of manufacture—that is, when the device comes off the assembly line with software or apps installed. If the device includes built-in conditional access capabilities (including an MVPD app pre-installed by the manufacturer) that enable the user to access multichannel video programming or other MVPD services, then the device is a navigation device. Otherwise, the device is “digital apparatus.”

Section I provides more detailed definitions of “digital apparatus” and “navigation devices” covered by the UI Rules, as well as other key terms.

V. What Are the Accessibility Requirements for Digital Apparatus?

In general—and if achievable—manufacturers must design and build digital apparatus so that people who are blind or visually impaired can control certain “appropriate built-in apparatus functions” in an accessible and usable way. This obligation applies only when a manufacturer includes one of these functions in the digital apparatus. This section defines the two elements of this requirement: which functions are “appropriate” apparatus functions, and the definitions of “accessible” and “usable.” This section also discusses digital apparatus manufacturer notification requirements.

In addition, digital apparatus with built-in closed-captioning capability must provide a way for users to activate closed captioning through a mechanism that is reasonably comparable to a button, key, or icon.

Similarly, digital apparatus with built-in video description capability must provide a way for users to activate video description through a mechanism that is reasonably comparable to a button, key, or icon.

¹⁵⁵ Video players that are subject to the rules include (1) proprietary video players that manufacturers embed in their devices, (2) video players designed by third parties but installed by manufacturers in their devices before sale, (3) video players that manufacturers require consumers to add to devices after their sale in order to enable the device to play video, and (4) video players that are part of operating systems used by devices, as well as any updates or upgrades to these video players. See User Interface Accessibility Order, 28 FCC Rcd at 17354.

¹⁵⁶ 47 U.S.C. §§ 303(aa), (bb); 47 C.F.R. §§ 79.107(a), 79.108(a). See User Interface Accessibility Order, 28 FCC Rcd at 17345.

In situations where manufacturers preload third-party apps in devices that display video programming, the FCC expects those manufacturers and app developers to cooperate to ensure the accessibility of the app. However, the FCC will hold the manufacturer responsible if the user interface of a pre-loaded video app does not meet the accessibility requirements of the UI Rules. Manufacturers have no obligation to make the functions of an app accessible under the UI Rules if a consumer independently installs an app.¹⁵⁷

A. WHICH FUNCTIONS OF DIGITAL APPARATUS MUST BE ACCESSIBLE TO THE BLIND AND VISUALLY IMPAIRED?

Manufacturers must design and build digital apparatus so that “appropriate built-in apparatus functions” are accessible to, and usable by, individuals who are blind or visually impaired, if achievable. Those functions that are accessed through on-screen text menus or other visual indicators built in to the digital apparatus must be accompanied by audio output. The FCC defines “appropriate built-in apparatus functions” as those used for receiving, playing back, or displaying video programming,¹⁵⁸ specifically:

- Power On / Off;
- Volume Adjust and Mute;
- Channel / Program Selection;¹⁵⁹
- Display Channel / Program Information;¹⁶⁰
- Configuration – Setup (including video display and audio settings, preferred language for on-screen guides or menus, setup options for parental controls, etc.);¹⁶¹
- Configuration – CC Control (enabling or disabling the display of closed captioning);
- Configuration – CC Options (including font size, font color, background color, opacity, etc., of closed captions);

¹⁵⁷ See User Interface Accessibility Order, 28 FCC Rcd at 17354.

¹⁵⁸ 47 C.F.R. § 79.107(a)(4). The full description of the set of “appropriate built-in apparatus functions” is provided in **Appendix B**.

¹⁵⁹ This includes the ability to select programs that are available on demand or on a digital video recorder (DVR), in addition to the ability to select linear programming that is available in real-time, and the ability to launch applications that are used for the selection and display of video programming. User Interface Accessibility Order, 28 FCC Rcd at 17367, n.222.

¹⁶⁰ This includes the ability to display channel and program information for programs that are available on demand or on a DVR, in addition to the ability to display channel and program information for linear programming that is available in real-time. *Id.* at 17368, n.223.

¹⁶¹ This includes the ability to change setup options for V-chip and parental controls. *Id.* at 17368, n.224.

- Configuration – Video Description Control (changing from the main audio to the secondary audio stream that contains video description, and vice versa);
- Display Configuration Info (displaying how user preferences are currently configured);
- Playback Functions;¹⁶² and
- Input Selection.

Again, digital apparatus manufacturers must make these functions accessible and usable, but the UI Rules do not require manufacturers to add any of these functions to a device. For example, a manufacturer does not have to include an input selection function into its digital apparatus, but if it does, that function must be accessible and usable, if achievable. If any of these functions is included in a third-party video programming app that the manufacturer pre-installs on a covered device, it must be made accessible and usable, if achievable.

B. WHAT DO “ACCESSIBLE” AND “USABLE” MEAN?

The user interface accessibility rules require certain functions, discussed above, of digital apparatus to be “accessible to and usable by” people who are blind or visually impaired. What is required for a covered function to be deemed “accessible” depends on how a user gains access to it. When a covered function is accessed through an on-screen text menu or other visual indicator built in to the device, the rules require that the function be accompanied by audio output, which may be either integrated or peripheral to the device, if achievable.

When a covered function is *not* accessed through an on-screen text menu or other visual indicator, that function does not have to be accompanied by audio output. To be deemed “accessible,” a covered function that is not accessed through an on-screen text menu or other visual indicator must be locatable, identifiable, and operable in accordance with each of the criteria below, unless not achievable. Each of the criteria must be evaluated independently.

- Operable without vision. Provide at least one mode that does not require user vision.
- Operable with low vision and limited or no hearing. Provide at least one mode that permits operation by users with visual acuity between 20/70 and 20/200, without relying on audio output.
- Operable with little or no color perception. Provide at least one mode that does not require user color perception.

¹⁶² This includes the ability to control playback functions for programs that are available on demand or on a DVR, in addition to the ability to control playback functions for linear programming that is available in real-time. *Id.* at 17368, n.225.

Manufacturers must make a digital apparatus “usable” by ensuring users have access to information and documentation on the full functionalities of digital apparatus, including instructions, product information (including accessible feature information), documentation, bills, and technical support which are provided to individuals without disabilities, if achievable.

The UI Rules for digital apparatus apply to all removable media devices, including standalone DVD and Blu-ray players that do not connect to the Internet or have a built-in television receiver. However, manufacturers do not have a compliance obligation to make the menus of the removable media itself (e.g., a DVD or Blu-ray Disc) accessible.

C. DIGITAL APPARATUS WITH BUILT-IN CLOSED CAPTIONING OR VIDEO DESCRIPTION CAPABILITY: ACTIVATION MECHANISMS

Digital apparatus with built-in closed-captioning capability must permit the user to activate closed captioning through a mechanism that is reasonably comparable to a button, key, or icon. Similarly, digital apparatus with built-in video description capability must permit the user to activate video description through a mechanism that is reasonably comparable to a button, key, or icon.

In determining whether a mechanism is reasonably comparable to a button, key, or icon, the FCC will consider the mechanism’s (1) simplicity and (2) ease of use. The following are examples of possibly compliant mechanisms:

- a dedicated button, key or icon;
- simple and easy to use gestures; and
- a single step activation from the same location as the volume controls.¹⁶³

In the Second UI Accessibility Order, the FCC revised earlier guidance regarding the closed captioning activation mechanism: closed captioning activation mechanisms that rely *solely* on voice control will not fulfill the FCC’s requirement that such a mechanism be reasonably comparable to a button, key, or icon.¹⁶⁴ Manufacturers may use voice controls to activate closed captioning as long as there is an alternative closed captioning activation mechanism that is simple and easy to use. Moreover, manufacturers may use simple and easy to use voice controls as the sole mechanism of activating video description.

Unlike the general accessibility and audio output requirements described above, “achievability” does not apply to the “reasonably comparable” mechanism requirement. Therefore, all covered digital apparatus must comply with this requirement.

¹⁶³ User Interface Accessibility Order, 28 FCC Rcd at 17381–82; Second UI Accessibility Order, 30 FCC Rcd at 13931–32.

¹⁶⁴ Second UI Accessibility Order, 30 FCC Rcd at 13930–31.

D. INFORMATION, DOCUMENTATION, TRAINING, AND NOTIFICATION REQUIREMENTS

Manufacturers must ensure access to information and documentation provided to their customers. In addition, manufacturers must include the contact method for obtaining the information about the accessible and usable features and information in general product information. When developing or modifying training programs, manufacturers must consider certain accessibility-related topics:

- Accessibility requirements of individuals with disabilities;
- Means of communicating with people with disabilities;
- Adaptive technology commonly used with the manufacturer's products;
- Designing for accessibility; and
- Solutions for accessibility and compatibility.

On their official websites, manufacturers must provide notice on their official websites about the availability of accessible digital apparatus. A manufacturer must prominently display information about accessible digital apparatus on its website in a way that makes such information available to all consumers. The notice must publicize the availability of accessible devices and the specific person, office or entity who can answer consumer questions about which products contain the required accessibility features. The contact office or person listed on the website must be able to answer both general and specific questions about the availability of accessible equipment, including, if necessary, providing information to consumers or directing consumers to a place where they can locate information about how to activate and use accessibility features. All required information must be provided in a website format that is accessible to people with disabilities.

VI. What Are the Accessibility Requirements for Navigation Devices?

The on-screen text menus and guides provided by navigation devices for the display or selection of multichannel video programming must be made audibly accessible, in real time, if achievable. Manufacturers must provide this functionality upon request by individuals who are blind or visually impaired, if achievable. Manufacturers also must ensure that the menus and guides provided by a pre-loaded app that displays multichannel video programming are audibly accessible, in real time, if achievable.

In addition, navigation devices with built-in closed-captioning capability must provide a means for users to activate closed captioning through a mechanism that is reasonably comparable to a button, key, or icon.

Manufacturers must also comply with information, documentation, training, and notification requirements.

A. WHICH FUNCTIONS OF NAVIGATION DEVICES MUST BE ACCESSIBLE TO THE BLIND AND VISUALLY IMPAIRED?

The FCC defines a set of functions¹⁶⁵ that are used for the display or selection of multichannel video programming. These functions must be made audibly accessible on navigation devices upon request by the blind and visually impaired, if offered via an on-screen menu or guide and if achievable. The functions are:

- Channel / Program Selection;¹⁶⁶
- Display Channel / Program Information;¹⁶⁷
- Configuration – Setup (including video display and audio settings, preferred language for on-screen guides or menus, setup options for parental controls, etc.);¹⁶⁸
- Configuration – CC Control (enabling or disabling the display of closed captioning);
- Configuration – CC Options (including font size, font color, background color, opacity, etc., of closed captions);
- Configuration – Video Description Control (changing from the main audio to the secondary audio stream that contains video description, and vice versa);
- Display Configuration Info (displaying how user preferences are currently configured);
- Playback Functions;¹⁶⁹ and
- Input Selection.

These nine functions are covered only when they are accessed through an on-screen text menu or guide. The following two functions must be made accessible to the blind and visually impaired regardless of whether they are accessed through on-screen

¹⁶⁵ 47 C.F.R. § 79.108(a)(2), (3). A detailed description of the set of covered navigation device functions is provided in **Appendix C**.

¹⁶⁶ This includes the ability to select programs that are available on demand or on a DVR, in addition to the ability to select linear programming that is available in real-time, and the ability to launch covered applications that are used for the selection and display of video programming. See User Interface Accessibility Order, 28 FCC Rcd at 17373–74 & n.222.

¹⁶⁷ This includes the ability to display channel and program information for programs that are available on demand or on a DVR, in addition to the ability to display channel and program information for linear programming that is available in real-time. See *id.* at 17373–74 & n.223.

¹⁶⁸ This includes the ability to change setup options for V-chip and parental controls. See *id.* at 17373–74, n.224.

¹⁶⁹ This includes the ability to control playback functions for programs that are available on demand or on a DVR, in addition to the ability to control playback functions for linear programming that is available in real-time. *Id.* at 17373-74 & n.225.

menus or guides: “**Power On/Off**” and “**Volume Adjust and Mute.**” These two functions must be made “accessible” as defined in Section V.B above (i.e., operable without vision, with low vision, with little or no color perception). Unlike the other nine covered functions, “Power On/Off” and “Volume Adjust and Mute” do not have to be made *audibly* “accessible.”

The audible version of an on-screen text menu or guide does not need to be an exact replication of the text. However, if achievable, all of the essential information from the on-screen text menu or guide must be made audibly accessible as requested or selected by the consumer.¹⁷⁰

As with digital apparatus, manufacturers of navigation devices must make covered functions accessible only if those functions are installed on a navigation device, and if achievable. The user interface accessibility rules do not require manufacturers to add any of the covered functions to a navigation device.

B. NAVIGATION DEVICES WITH BUILT-IN CLOSED CAPTIONING CAPABILITY: ACTIVATION MECHANISM

Navigation devices with built-in closed-captioning capability must provide a means for the user to activate closed captioning through a mechanism that is reasonably comparable to a button, key, or icon. Unlike digital apparatus, navigation devices do *not* have to provide a means for the user to activate video description through a mechanism that is reasonably comparable to a button, key, or icon.¹⁷¹

As with digital apparatus, in determining whether a mechanism is reasonably comparable to a button, key, or icon, the FCC will consider the simplicity and ease of use of the mechanism. The following are examples of compliant mechanisms:

- a dedicated button, key or icon;
- simple and easy to use gestures; and
- a single step activation from the same location as the volume controls.

In the UI Accessibility Second Order, the FCC revised earlier guidance regarding the closed captioning activation mechanism: closed captioning activation mechanisms that rely *solely* on voice control will not fulfill the FCC’s requirement that such a mechanism be reasonably comparable to a button, key, or icon.¹⁷² Manufacturers may

¹⁷⁰ The FCC expects manufacturers to consult with individuals who are blind or visually impaired in its efforts to ensure that on-screen text menus and guides are made accessible in a manner that effectively meets the accessibility needs of those individuals.

¹⁷¹ Although not a “user interface rule,” the accessible emergency information rules require that navigation device manufacturers provide a simple and easy to use mechanism to activate the secondary audio stream, which provides both emergency information and video description. 47 C.F.R. 79.105(d).

¹⁷² Second UI Accessibility Order, 30 FCC Rcd at 13930–31.

use voice controls to activate closed captioning as long as there is an alternative closed captioning activation mechanism that is simple and easy to use.

All navigation devices with built-in closed captioning capability must have a “reasonably comparable” mechanism for the user to activate closed captioning. There are no exceptions, nor does the achievability analysis apply.

C. HOW DO MANUFACTURES PROVIDE ACCESSIBLE MENUS AND GUIDES “UPON REQUEST”?

The UI Rules are designed to help ensure that blind and visually impaired consumers can purchase “accessible” navigation devices as easily as unimpaired consumers can purchase navigation devices without accessible features.

Manufacturers of navigation devices must offer accessible versions of those devices through the same means that they generally use to provide such devices to other consumers, if achievable. For example, if a manufacturer makes its navigation devices available via retail outlets, it must make accessible versions of those devices available in the same way that it generally makes available other navigation devices, such as via retail stores and/or the Internet. Manufacturers must make a good faith effort to have retailers (including carriers) make accessible versions available to the same extent that non-accessible versions are made available to consumers generally. Similarly, if a manufacturer allows consumers to purchase navigation devices directly from the manufacturer via phone or the Internet, the manufacturer must allow blind and visually impaired consumers to request accessible navigation devices through those same means.

In addition, the way that a manufacturer accepts requests for accessible versions of a navigation device (for example, via a telephone number, email address, or website) must not be more burdensome to blind and visually impaired consumers than the way that consumers without such disabilities can order navigation devices, if achievable.¹⁷³ For example, if a manufacturer accepts requests for non-accessible versions through a telephone number, the manufacturer must be prepared to handle requests for accessible versions of the device in the same manner. Similarly, if a manufacturer establishes a website through which blind or visually impaired consumers can request compliant devices, the website must be screen-readable or otherwise allow the consumer to request an accessible device as seamlessly as could other consumers requesting navigation devices.

A manufacturer must provide accessible navigation devices to requesting blind and visually impaired individuals within a time period comparable to the time that it provides navigation devices to other consumers, if achievable. In assessing compliance,

¹⁷³ Under certain limited circumstances discussed below in Section VI.C.2, however, a navigation device manufacturer may require verification that the consumer is blind or visually impaired, for example, where the manufacturer is providing an accessible device that is different from (and more advanced than) the equipment that the customer is using currently.

the FCC may consider the amount of time necessary to schedule a truck roll, identify and deploy a specialist, or take any other action that is part of the process for providing any device to any customer.

1. USING SEPARATE EQUIPMENT OR SOFTWARE

If a navigation device is made accessible using separate equipment or software, manufacturers are obligated to provide that separate equipment or software to the requesting individual. This is true even if the manufacturer relies on a retailer or carrier to provide accessible navigation devices to requesting consumers.

Furthermore, manufacturers must ensure that the separate equipment or software makes all the covered functions of the navigation device accessible. Any separate equipment or software must be provided in a way that is not more burdensome to requesting blind or visually impaired individuals than the way that the manufacturer generally provides navigation devices to other consumers. For example, a manufacturer could meet its obligation by ensuring that the separate equipment or software is made available to requesting blind or visually impaired consumers at the same point of sale as the navigation device itself.

A manufacturer of navigation devices may not impose any charges for separate equipment or software (including the wholesale cost of providing the separate equipment or software) beyond the charges that the manufacturer has imposed for a non-accessible navigation device. However, a manufacturer could charge more for enhanced functionality. In other words, if a manufacturer makes more than one separate accessibility solution (equipment or software) available to consumers, it may impose reasonable charges if the consumer requests a solution with enhanced functionality.

If the only accessible navigation devices that a manufacturer makes available are among the more expensive, sophisticated devices that it offers, and a blind consumer requests an accessible lower-end device, then the manufacturer must provide the more sophisticated accessible device at the price of the lower-end device.

2. VERIFYING ELIGIBILITY

A navigation device manufacturer generally may not require verification that a customer is blind or visually impaired prior to the customer's purchase of an accessible navigation device. However, a manufacturer may verify customer eligibility when the manufacturer chooses to meet its accessibility obligations by using an accessibility solution that provides the consumer with sophisticated equipment or services at a price that is lower than the price offered to the general public.

If a manufacturer requires consumer verification of eligibility, the manufacturer must obtain the consumer's written or electronic consent before disclosing personally identifiable information about the consumer, and take such actions as are necessary to

prevent unauthorized access to that information by a person other than the consumer or manufacturer.

D. INFORMATION, DOCUMENTATION, TRAINING, AND NOTIFICATION REQUIREMENTS

Manufacturers must ensure access to information and documentation provided to their customers. Manufacturers must also include the contact method for obtaining the information about the accessible and usable features and information in general product information. When developing or modifying training programs, manufacturers must consider certain accessibility-related topics:

- Accessibility requirements of individuals with disabilities;
- Means of communicating with people with disabilities;
- Adaptive technology commonly used with the manufacturer's products;
- Designing for accessibility; and
- Solutions for accessibility and compatibility.

On their official websites, manufacturers must provide notice about the availability of accessible navigation devices. A manufacturer must prominently display information about accessible navigation devices and separate solutions on its website in a way that makes such information available to all consumers. The notice must publicize the availability of accessible devices and separate solutions and explain the means for making requests for accessible equipment and the specific person, office or entity to whom such requests are to be made. The contact office or person listed on the website must be able to answer both general and specific questions about the availability of accessible equipment, including, if necessary, providing information to consumers or directing consumers to a place where they can locate information about how to activate and use accessibility features. All required information must be provided in a website format that is accessible to people with disabilities.

VII. Applying the “Achievable” Test – The Four Factors

A covered entity must ensure that its covered devices (i.e., navigation devices or digital apparatus) are compliant with the UI Rules, **unless not achievable**.¹⁷⁴ “Achievable” means “with reasonable effort or expense.”¹⁷⁵

The CVAA defines four components of the “achievable” test. These are:

- Nature and cost of the product;

¹⁷⁴ See 47 U.S.C. §§ 303(u)(2)(A), 303(z)(1).

¹⁷⁵ *Id.* § 617(g).

- Technical and economic impact on the covered entity;
- Type of operations; and
- Extent of accessible offerings.

The FCC will consider these factors—and only these factors—in determining “achievability.” Therefore, in internal decision-making, covered entities should consider these factors as well to maximize the chance that they will not run afoul of the FCC’s UI Rules and be fined for those violations. The FCC weighs each factor equally.

The FCC presumes that a covered entity is able to comply with the UI Rules, unless it can prove otherwise. Therefore, if a covered entity fails to keep adequate records explaining why it did or did not comply with the rules—that is, its decisions regarding what is “achievable” under the UI Rules—it risks potentially large fines. In other words, the covered entity bears the burden of proof to show why it believed that complying with the UI Rules was not achievable.

A. NATURE AND COST OF THE PRODUCT

The FCC will weigh “the nature and cost of the steps needed to meet the [accessibility] requirements with respect to the specific equipment . . . in question.”¹⁷⁶

The FCC recognizes that if an accessibility feature “fundamentally alters” a product, then it is “not achievable” to include that feature in that product. A “fundamental alteration” means:

- to reduce substantially the functionality of the product,
- to render some features inoperable,
- to impede substantially or deter use of the product by individuals without the specific disability the feature is designed to address, or
- to alter substantially and materially the shape, size, or weight of the product.

Since all accessibility enhancements in one sense require an alteration to the design of a product, not all changes to a product will be considered fundamental alterations. Rather, the alteration to the product must be fundamental for the accessibility feature to be considered intrinsically not achievable. The “not achievable because of a fundamental alteration” standard is difficult to satisfy, so covered entities must be prepared to defend their decision-making.

One important criterion the FCC will evaluate under this factor is whether an accessibility feature has been implemented for competing products or services. If an accessibility feature has been implemented by a competitor or other manufacturer, then it is more likely that implementation of the accessibility feature is achievable. Therefore,

¹⁷⁶ *Id.* § 617(g)(1).

a covered entity should consider competing products, and, if those same features cannot be implemented in the covered entity's product, the covered entity should be prepared to explain why. However, a covered entity may rebut evidence provided by competing products by demonstrating that the circumstances of the product offered by that particular entity renders the requirement not achievable.

Please note that, for purposes of this factor, a covered entity cannot rely on a comparison of the cost of compliance to the overall production cost of the product.

B. TECHNICAL AND ECONOMIC IMPACT ON THE COVERED ENTITY

The FCC recognizes that a covered entity may not have the resources to incorporate an accessibility feature into its product. It further recognizes that the inclusion of an accessibility feature may have a greater impact on a small entity than a larger one. The covered entity must consider "the technical and economic impact on the operation of the manufacturer . . . and on the operation of the specific equipment . . . in question, including on the development and deployment of new communications technologies."¹⁷⁷ The FCC will weigh both the costs of making a product accessible and an entity's total gross revenues. In contrast to the first factor, the covered entity may appropriately consider the cost of compliance in comparison to the overall cost of producing a product when evaluating this factor.

C. TYPE OF OPERATIONS

The FCC will weigh the covered entity's experience in manufacturing covered devices; therefore, the covered entity must consider its operations as a manufacturer and/or service provider when making an achievability determination.¹⁷⁸ The covered entity's experience in the various information technology markets is relevant to the determination of this factor. In addition, the entity's size, resources, business models, technology configurations, and platforms are also relevant factors. However, the fact that a covered entity has substantial financial resources does not, by itself, trigger a finding of achievability.

D. EXTENT OF ACCESSIBLE OFFERINGS

Finally, the FCC will weigh "the extent to which the service provider or manufacturer in question offers accessible services or equipment containing varying degrees of functionality and features, and offered at differing price points."¹⁷⁹

Covered entities should generally consider what is achievable with respect to each product to which the achievable limitation applies, to ensure the entity offers consumers with meaningful choices through a range of products with varying degrees of functionality and features, at differing price points. If a line of products includes low-end

¹⁷⁷ *Id.* § 617(g)(2).

¹⁷⁸ *Id.* § 617(g)(3).

¹⁷⁹ *Id.* § 617(g)(4).

products, then it is just as important that low-end products be accessible as the high-end products, if achievable.

VIII. Exclusions and Alternate Means

A. EXCLUSIONS

1. PROFESSIONAL AND COMMERCIAL EQUIPMENT

Commercial video equipment, including professional movie theater projectors, and similar types of professional equipment, are not required to comply with the UI Rules.¹⁸⁰ However, other federal laws may impose accessibility obligations to ensure professional or commercial equipment are accessible to employees with disabilities, or enable the delivery of accessible services to the public.

2. PUBLIC SAFETY AND ENTERPRISE EQUIPMENT

Public safety and enterprise equipment is not required to comply with the UI Rules.

3. BROADBAND EQUIPMENT

General purpose broadband equipment, such as routers, does not fall under the UI Rules. Although cable modems are navigation devices that consumers use to access an MVPD's Internet service, they have no compliance obligations under section 205 because they cannot display or select multichannel video programming and do not have "built-in closed captioning capability."

B. ALTERNATE MEANS OF COMPLIANCE

A covered entity may meet all of the requirements of the UI Rules for digital apparatus via "alternate means."¹⁸¹ If an entity wishes to use an "alternate means" to comply with the applicable requirements, the entity may either (i) request an FCC determination that the proposed alternate means satisfies the statutory requirements through an informal request for FCC action,¹⁸² or (ii) claim in defense to a complaint or enforcement action that the FCC should determine that the entity's approach to satisfying the statutory requirements was a permissible alternate means of compliance.

IX. Recordkeeping

Covered entities whose products do not meet all of the accessibility requirements for covered functions and claim as a defense that it is not "achievable" for them to do so

¹⁸⁰ *Id.* § 79.103(b)(2).

¹⁸¹ 47 U.S.C. § 303 note.

¹⁸² See 47 C.F.R. § 1.41 (informal requests for FCC action).

must be prepared to produce sufficient records regarding their consideration of the four achievability factors, discussed above.

- The nature and cost of the steps needed to meet the functional requirements with respect to the specific equipment in question;
- The technical and economic impact on the operation of the covered entity and on the operation of the specific equipment in question, including on the development and deployment of new communications technologies;
- The type of operations of the covered entity; and
- The extent to which the covered entity offers equipment containing varying degrees of functionality and features, and offered at differing price points.

Failure to provide sufficient explanation and supporting evidence will result in an FCC decision against the covered entity and in favor of the complaining party.

X. Complaint Procedures

Written complaints alleging non-compliance of covered devices with the UI Rules may be filed either with the FCC or with the covered entity responsible for the problem. The FCC may forward such complaints to the named manufacturer or device provider, as well as any other entity that the FCC determines may be involved, and may request additional information from any relevant party to investigate and adjudicate potential violations. Specifically, the complaint procedures:

- require complainants to file within 60 days after experiencing a problem;
- allow complainants to file their complaints either with the FCC or with the covered entity responsible for the problem;
- provide the entity 30 days to respond to the complaint;
- do not specify a time frame within which the FCC must act on complaints;
- follow the FCC's flexible, case-by-case forfeiture approach;
- specify the information that the complaints must include; and
- require covered entities to make contact information available to end users for the receipt and handling of written complaints.

The complaint should include the following information:

- the name, address, and other contact information of the complainant, such as telephone number and e-mail address;
- the name and contact information, such as postal address, of the apparatus manufacturer or provider;

- information sufficient to identify the software or device used to view or to attempt to view video programming;
- the date or dates on which the complainant purchased, acquired, or used, or tried to purchase, acquire, or use the apparatus or navigation device;
- a statement of facts sufficient to show that the manufacturer or provider has violated or is violating the FCC's rules;
- the specific relief or satisfaction sought by the complainant;
- the complainant's preferred format or method of response to the complaint; and
- if a section 205 complaint, the date that the complainant requested an accessible navigation device and the person or entity to whom that request was directed.

XI. Conclusion

If there are questions on this manual, please contact David Grossman, CTA's Vice President, Policy & Regulatory Affairs, at dgrossman@cta.tech, or Rachel Nemeth, CTA's Senior Director, Regulatory Affairs, at rnemeth@cta.tech. These materials have been prepared for educational and information purposes only. They are not legal advice or legal opinions on any specific matters. Legal advice depends on the specific facts and circumstances of the particular situation in question. Those seeking specific legal advice or assistance should contact an attorney. Always contact an attorney to get complete, accurate, and up-to-date legal advice.

Appendix A: Compliance Timeline for Covered Devices

Date	Description
October 31, 2013	FCC releases User Interface Accessibility Order
December 20, 2013	User Interface Accessibility Order published in Federal Register
January 21, 2014	UI Rules generally become effective (some provisions not effective until approval by the U.S. Office of Management and Budget)
November 20, 2015	FCC releases Second UI Accessibility Order
February 4, 2016	Second UI Accessibility Order published in the Federal Register
March 7, 2016	UI Rules adopted in the Second UI Accessibility Order generally become effective thirty days after Federal Register publication (some provisions not effective until approval by the U.S. Office of Management and Budget)
December 20, 2016	Full compliance with UI Rules required for most covered devices (this deadline applies to devices based on their date of manufacture)
December 20, 2021	Full compliance with UI Rules required for display-only monitors, video projectors, and digital cameras and similar equipment

Appendix B – Appropriate built-in apparatus functions

(47 C.F.R. § 79.107(a)(4))

Appropriate built-in apparatus functions are those functions that are used for receiving, playing back, or displaying video programming, and include the following functions:

- (i) *Power On/Off*. Function that allows the user to turn the device on or off.
- (ii) *Volume Adjust and Mute*. Function that allows the user to adjust the volume and to mute or un-mute the volume.
- (iii) *Channel/Program Selection*. Function that allows the user to select channels and programs (e.g., via physical numeric or channel up/channel down buttons or via on screen guides and menus).
- (iv) *Display Channel/Program Information*. Function that allows the user to display channel or program information.
- (v) *Configuration—Setup*. Function that allows the user to access and change configuration or setup options (e.g., configuration of video display and audio settings, selection of preferred language for onscreen guides or menus, etc.).
- (vi) *Configuration—CC Control*. Function that allows the user to enable or disable the display of closed captioning.
- (vii) *Configuration—CC Options*. Function that allows the user to modify the display of closed caption data (e.g., configuration of the font size, font color, background color, opacity, etc.).
- (viii) *Configuration—Video Description Control*. Function that allows the user to enable or disable the output of video description (i.e., allows the user to change from the main audio to the secondary audio stream that contains video description, and from the secondary audio stream back to the main audio).
- (ix) *Display Configuration Info*. Function that allows the user to display how user preferences are currently configured.
- (x) *Playback Functions*. Function that allows the user to control playback functions (e.g., pause, play, rewind, fast forward, stop, and record).
- (xi) *Input Selection*. Function that allows the user to select their preferred input source.

Appendix C – Navigation Device Functions Covered by the Accessibility Requirements

(47 C.F.R. § 79.102(a)(2), (3))

(2) The following functions are used for the display or selection of multichannel video programming and must be made audibly accessible by manufacturers of navigation devices and MVPDs covered by this section when included in a navigation device and accessed through on-screen text menus or guides:

(i) *Channel/Program Selection*. Function that allows the user to select channels and programs (e.g., via physical numeric or channel up/channel down buttons or via on screen guides and menus).

(ii) *Display Channel/Program Information*. Function that allows the user to display channel or program information.

(iii) *Configuration—Setup*. Function that allows the user to access and change configuration or setup options (e.g., configuration of video display and audio settings, selection of preferred language for onscreen guides or menus, etc.).

(iv) *Configuration—CC Control*. Function that allows the user to enable or disable the display of closed captioning.

(v) *Configuration—CC Options*. Function that allows the user to modify the display of closed caption data (e.g., configuration of the font size, font color, background color, opacity, etc.).

(vi) *Configuration—Video Description Control*. Function that allows the user to enable or disable the output of video description (i.e., allows the user to change from the main audio to the secondary audio stream that contains video description, and from the secondary audio stream back to the main audio).

(vii) *Display Configuration Info*. Function that allows the user to display how user preferences are currently configured.

(viii) *Playback Functions*. Function that allows the user to control playback functions (e.g., pause, play, rewind, fast forward, stop, and record).

(ix) *Input Selection*. Function that allows the user to select their preferred input source.

(3) Manufacturers of navigation devices and MVPDs covered by this section must ensure that the following functions are made accessible, as defined by § 79.107(a)(3), to individuals who are blind or visually impaired:

(i) *Power On/Off*. Function that allows the user to turn the device on or off.

(ii) *Volume Adjust and Mute*. Function that allows the user to adjust the volume and to mute or un-mute the volume.