

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
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
CG Docket No. 10-213

BIENNIAL REPORT TO CONGRESS
AS REQUIRED BY THE
TWENTY-FIRST CENTURY COMMUNICATIONS
AND VIDEO ACCESSIBILITY ACT OF 2010

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By the Acting Chief, Consumer and Governmental Affairs Bureau:

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I. INTRODUCTION AND OVERVIEW

1. The Consumer and Governmental Affairs Bureau (CGB) of the Federal Communications Commission (FCC or Commission) prepared this Biennial Report (*Report*) for submission to the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Energy and Commerce of the House of Representatives (Committees) in accordance with the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA). This *Report* presents information and assessments related to the accessibility of telecommunications and advanced communications services and equipment, along with a summary of actions taken by the Commission related to the CVAA.

2. The purpose of the CVAA,¹ which amended the Communications Act of 1934 (Act), is “to help ensure that individuals with disabilities are able to fully utilize communications services and equipment and better access video programming.”² In enacting the CVAA, Congress concluded that people with disabilities often have not shared in the benefits of this rapid technological advancement.³ Congress directed the Commission to evaluate the progress made pursuant to the CVAA’s mandates in addressing this inequity in a report to Congress every two years.⁴ The Commission delivered the first biennial report to Congress on October 5, 2012 (*2012 CVAA Biennial Report*).⁵

¹ Pub. L. No. 111-260, 124 Stat. 2751 (2010) (as codified in various sections of 47 U.S.C.); Pub. L. 111-265, 124 Stat. 2795 (2010) (making technical corrections to the CVAA). The foregoing are collectively referred to as the CVAA.

² S. Rep. No. 111-386 at 1 (Senate Report); H.R. Rep. No. 111-563 at 19 (House Report) (2010) (noting that the communications marketplace had undergone a “fundamental transformation” since Congress adopted Section 255 of the Act in 1996). See 47 U.S.C. § 255 (requiring access to telecommunications services and equipment).

³ Senate Report at 1-2; House Report at 19.

⁴ See Section 717(b)(1) of the Act, as added by the CVAA, codified at 47 U.S.C. § 618(b)(1). Biennial reports must be submitted to the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Energy and Commerce of the House of Representatives. *Id.* See also Senate Report at 9; House Report at 27 (the

3. Following passage of the CVAA on October 8, 2010, the Commission immediately began implementing this landmark legislation. In its *2012 CVAA Biennial Report*, the Commission reported that it had met every one of the CVAA's rigorous rulemaking deadlines, having already released five reports and orders adopting rules to implement various provisions of the CVAA.⁶ Since the submission of the *2012 CVAA Biennial Report*, the Commission has continued to work with consumer, industry, and government stakeholders to ensure effective and timely implementation of the CVAA. As a result, the Commission has since released six additional reports and orders to implement the CVAA,⁷ in compliance

report should "assess[] the level of compliance with the requirements of [the CVAA], as well as other matters related to the effectiveness of the Commission's complaint resolution process").

⁵ See *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*, CG Docket No. 10-213, Biennial Report to Congress as Required by the Twenty-First Century Communications and Video Accessibility Act of 2010, DA 12-1602, 27 FCC Rcd 12204 (CGB 2012) (*2012 CVAA Biennial Report*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1602A1.pdf. Both the *2012 CVAA Biennial Report* and the current *Report* were prepared pursuant to CGB's delegated authority. 47 C.F.R. § 0.361. This *Report* is being submitted concurrently to the Committees.

⁶ *2012 CVAA Biennial Report*, 27 FCC Rcd at 12205-6, ¶ 2.

⁷ Since the submission of the *2012 CVAA Biennial Report*, the Commission has released the following reports and orders adopting implementing regulations:

Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf (adopting rules requiring that emergency information provided in video programming be made accessible to individuals who are blind or visually impaired and that certain apparatus be capable of delivering video description and emergency information).

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; Amendments to the Commission's Rules Implementing Sections 255 and 251(a) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Second Report and Order, FCC 13-57, 28 FCC Rcd 5957 (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-57A1.pdf (implementing Section 718 and part of Section 716 of the Act to ensure that people with disabilities have access to emerging and innovative advanced communications technologies).

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment, PS Dockets Nos. 11-153 and 10-255, Report and Order, FCC 13-64, 28 FCC Rcd 7556 (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-64A1.pdf (requiring all wireless carriers and providers of interconnected text messaging services to provide an automatic bounce-back text message to consumers who try to send a text message to 911 where text-to-911 is not available).

Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf (adopting rules requiring accessibility of user interfaces and video programming guides and menus).

with all CVAA deadlines, where feasible.⁸ Resources throughout the Commission's bureaus and offices have contributed to this comprehensive effort, reflecting the Commission's ongoing commitment to ensuring communications access for millions of Americans with disabilities.

4. In accordance with the CVAA, Section II of this *Report* presents information and assessments related to the accessibility of telecommunications and advanced communications services and equipment.⁹ Section II.A provides a general overview of Sections 255, 716, 717, and 718 of the Act, the statutory provisions governing accessible communications; a brief discussion of the Commission's actions to implement Sections 716, 717(a), and 718; and the scope of this *Report*.¹⁰ Sections 716, 717, and 718 are among the new provisions added to the Act by the CVAA.¹¹ Sections 716 and 718 expand the scope of the Act's accessibility requirements to cover advanced communications services and equipment, and Internet browsers built into mobile phones, respectively.¹² Section 717(a) addresses the recordkeeping and enforcement obligations of service providers and equipment manufacturers that are subject to Sections 255, 716, and 718.¹³

5. Sections II.B, C, D, and E of this *Report* present the information which the Commission must submit to the Committees every two years after October 8, 2010, the date of enactment of the CVAA, as required by Section 717(b)(1) of the Act.¹⁴ Specifically, the *Report* must include the following information and assessments:¹⁵

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, MB Docket No. 11-154, Second Order on Reconsideration and Second Further Notice of Proposed Rulemaking, FCC 14-97, 29 FCC Rcd 8687 (2014), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-97A1.pdf (extending Internet protocol closed captioning requirements to certain excerpts of video programming that has been shown on television with closed captioning).

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment, PS Docket Nos. 11-153 and 10-255, Second Report and Order and Third Further Notice of Proposed Rulemaking, FCC 14-118, 29 FCC Rcd 9846 (2014), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-118A1.pdf (requiring providers of interconnected text messaging applications to be capable of supporting text-to-911 service by December 31, 2014, and thereafter to implement text-to-911 by June 30, 2015 or within six months from the date of a Public Safety Answering Point (PSAP) request, whichever is later, for that PSAP).

⁸ The CVAA required the Commission to prescribe regulations to implement Sections 204 and 205 of the CVAA by October 9, 2013, a deadline that occurred during a shutdown of the Federal government due to a lapse in appropriations, when the Commission could not conduct normal business operations. *See* CVAA, §§ 204(b), 205(b). The Commission adopted a report and order with final rules to implement these sections within two weeks after the government re-opened.

⁹ CVAA, § 104(a); codified at 47 U.S.C. § 618(b).

¹⁰ 47 U.S.C. §§ 255, 617, 618(a), 619.

¹¹ CVAA, § 104(a); 47 U.S.C. §§ 617, 618, 619.

¹² 47 U.S.C. §§ 617, 619.

¹³ 47 U.S.C. § 618(a),

¹⁴ 47 U.S.C. § 618(b)(1).

¹⁵ For convenience, in the list of required information and assessments, each item is cross-referenced to the section of the *Report* addressing that item.

- (A) An assessment of the level of compliance with Sections 255 (accessibility of telecommunications services and equipment), 716 (accessibility of advanced communications services and equipment), and 718 (accessibility of Internet browsers built into mobile phones). *See, infra*, Section II.B.
- (B) An evaluation of the extent to which any accessibility barriers still exist with respect to new communications technologies. *See, infra*, Section II.C.
- (C) The number and nature of complaints received pursuant to Section 717(a) (recordkeeping and enforcement obligations of service providers and equipment manufacturers that are subject to Sections 255, 716, and 718). *See, infra*, Section II.D.1.
- (D) A description of the actions taken to resolve such complaints, including forfeiture penalties assessed. *See, infra*, Section II.D.2.
- (E) The length of time that was taken by the Commission to resolve each such complaint. *See, infra*, Section II.D.3.
- (F) The number, status, nature, and outcome of any actions for mandamus filed and of any appeals filed. *See, infra*, Section II.D.4.
- (G) An assessment of the effect of the recordkeeping and enforcement requirements of Section 717 on the development and deployment of new communications technologies.¹⁶ *See, infra*, Section II.E.

6. On June 17, 2014, CGB invited comments related to the Commission's preparation of this *Report*.¹⁷ Those comments helped to inform the Commission's tentative findings.¹⁸ On August 28, 2014, CGB sought comment on the Commission's tentative findings pursuant to Section 717(b)(2) of the Act.¹⁹ Specifically, CGB sought comment on whether the tentative findings accurately represent the current state of communications technologies accessibility and, if not, why not and how they should be revised to do so.²⁰ CGB also asked about the extent to which the industry actions described in the *2014 CVAA Tentative Findings PN* have resulted in increased accessibility, and where relevant, usability and compatibility, of telecommunications and advanced communications services and equipment since the *2012 CVAA Biennial Report*.²¹ Further, CGB sought comment on whether these products and services offer the same range of low-end and high-end features, functions, and prices that are available to the general public.²² Finally, CGB asked about other kinds of information that would help the Commission to conduct these assessments, as required by the CVAA, for the next biennial report to be submitted by

¹⁶ *See* 47 U.S.C. § 618(b)(1).

¹⁷ *Consumer and Governmental Affairs Bureau Seeks Comment on the Accessibility of Communications Technologies for the 2014 Biennial Report Under the Twenty-First Century Communications and Video Accessibility Act*, CG Docket No. 10-213, Public Notice, DA 14-828, 29 FCC Rcd 7316 (CGB 2014) (*2014 CVAA Assessment PN*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-828A1.pdf.

¹⁸ In response to the *2014 CVAA Assessment PN*, three comments were filed by consumer groups, numerous comments were filed by individual consumers, and four comments were filed by industry parties. *See* Appendix A for a list of commenters.

¹⁹ 47 U.S.C. § 618(b)(2); *Consumer and Governmental Affairs Bureau Seeks Comment on its Tentative Findings About the Accessibility of Communications Technologies for the 2014 Biennial Report Under the Twenty-First Century Communications and Video Accessibility Act*, CG Docket No. 10-213, Public Notice, DA 14-1255, 29 FCC Rcd ___ (CGB, rel. Aug. 28, 2014) (*2014 CVAA Tentative Findings PN*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1255A1.pdf.

²⁰ *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ___, ¶ 13.

²¹ *Id.*

²² *Id.*

October 8, 2016.²³ Although the comments in response to the *2014 CVAA Tentative Findings PN* were fewer than the initial *2014 CVAA Assessment PN*,²⁴ we believe that the comments received in response to the *2014 CVAA Assessment PN* and the *2014 CVAA Tentative Findings PN*, collectively, support our tentative findings and, therefore, we affirm these tentative findings which are presented as findings in this *Report*.²⁵

7. Section II.F concludes this section of the *Report* by summarizing the comments received in response to the *2014 CVAA Tentative Findings PN* related to the preparation of the next biennial report, which is due by October 8, 2016.

8. Finally, Section III of this *Report* presents a summary of other actions taken by the Commission related to the CVAA since the submission of the *2012 CVAA Biennial Report*.

II. COMMUNICATIONS ACCESSIBILITY

A. Background

1. Section 255

9. Section 255 of the Act requires providers of telecommunications service and manufacturers of telecommunications equipment or customer premises equipment (CPE) to ensure that such services and equipment are accessible to and usable by individuals with disabilities, if readily achievable.²⁶ When these requirements are not readily achievable, covered entities must ensure that their services and equipment are compatible with existing peripheral devices or specialized CPE commonly used by individuals with disabilities to achieve access, if readily achievable.²⁷ The Commission's Section 255 rules cover, among other things, telephone calls, call waiting, speed dialing, call forwarding, computer-provided directory assistance, call monitoring, caller identification, call tracing, and repeat dialing.²⁸ Equipment covered under Section 255 includes, but is not limited to, telecommunications equipment and CPE, such as wireline, cordless, and wireless telephones, fax machines, and answering machines.²⁹ In addition, the rules implementing Section 255 cover voice mail and interactive voice

²³ *Id.*

²⁴ Only two consumer groups, one industry party, and two accessibility-related entities filed comments in response to the *2014 CVAA Tentative Findings PN*. See Appendix A for a list of commenters.

²⁵ See ¶¶ 39-45, *infra* (findings on compliance with Sections 255, 716, and 718), ¶¶ 49-50, *infra* (findings on accessibility barriers in new communications technologies), and ¶ 70, *infra* (findings on the effect of Section 717's recordkeeping and enforcement requirements on the development and deployment of new communications technologies).

²⁶ 47 U.S.C. §§ 255(b), (c). See also 47 C.F.R. Part 6 and Part 7. "Readily achievable" is defined as "easily accomplishable and able to be carried out without much difficulty or expense." 42 U.S.C. § 12181(9).

²⁷ 47 U.S.C. § 255(d).

²⁸ See *Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities*, WT Docket No. 96-198, Report and Order and Further Notice of Inquiry, FCC 99-181, 16 FCC Rcd 6417, 6449, ¶ 77 (1999) (*Section 255 Order*). See also 47 C.F.R. Part 6.

²⁹ The Act defines telecommunications equipment as "equipment, other than customer premises equipment, used by a carrier to provide telecommunications services, and includes software integral to such equipment (including

response systems (phone systems that provide callers with menus of choices).³⁰ In 2007, the Commission adopted rules extending Section 255's accessibility obligations to interconnected voice over Internet protocol (VoIP) service providers and interconnected VoIP equipment manufacturers.³¹

2. Sections 716 and 717

10. Section 716 of the Act requires providers of advanced communications services and manufacturers of equipment used for advanced communications services to ensure that their services and equipment are accessible to and usable by individuals with disabilities, unless doing so is not achievable (defined as "with reasonable effort or expense").³² "Advanced communications services" include: (1) interconnected VoIP service; (2) non-interconnected VoIP service; (3) electronic messaging service; and (4) interoperable video conferencing service.³³ In contrast to interconnected VoIP services, which enable people to make and receive calls to and from the public switched telephone network (PSTN), non-interconnected VoIP services include services that enable real-time voice communications either to or from the PSTN (but not both) or which neither begin nor end on the PSTN at all.³⁴ Electronic messaging services include services such as e-mail, short message service (SMS) text messaging, and instant messaging, which enable real-time or near real-time text messages between individuals over communications networks.³⁵ Interoperable video conferencing services provide real-time video communications, including audio, to enable users to share information.³⁶

11. The accessibility requirements for section 716 may be satisfied by: (1) building accessibility into the service or equipment;³⁷ or (2) using third-party applications, peripheral devices, software, hardware, or CPE that is available to consumers at nominal cost and that individuals with disabilities can access.³⁸ When ensuring accessibility through either of those options is not achievable, covered entities must ensure that their services and equipment are compatible with existing peripheral

upgrades." 47 U.S.C. § 153(52). It defines "customer premises equipment" as "equipment employed on the premises of a person (other than a carrier) to originate, route or terminate telecommunications." 47 U.S.C. § 153(16).

³⁰ 47 C.F.R. Part 7. See also FCC Section 255 Consumer Guide available at <http://www.fcc.gov/guides/disabled-persons-telecommunications-access-section-255>.

³¹ *Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, WC Docket No. 04-36, WT Docket No. 96-198, CG Docket No. 03-123, CC Docket No. 92-105, Report and Order, FCC 07-110, 22 FCC Rcd 11275 (2007) (*Section 255 VoIP Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-07-110A1.pdf.

³² 47 U.S.C. §§ 617(a)(1), (b)(1), (g).

³³ 47 U.S.C. § 153(1). See also 47 C.F.R. § 14.10(c). Section 716 of the Act does not apply to services or equipment, including interconnected VoIP services and equipment, which were subject to Section 255 on October 7, 2010. 47 U.S.C. § 617(f). Those services and equipment remain subject to the requirements of Section 255. *Id.*

³⁴ See 47 U.S.C. §§ 153(25), 153(36); 47 C.F.R. § 9.3.

³⁵ 47 U.S.C. § 153(19).

³⁶ 47 U.S.C. § 153(27).

³⁷ 47 U.S.C. §§ 617(a)(2)(A), (b)(2)(A).

³⁸ 47 U.S.C. §§ 617(a)(2)(B), (b)(2)(B).

devices or specialized CPE commonly used by individuals with disabilities to achieve access, unless that is not achievable.³⁹

12. Section 717 of the Act requires the Commission to establish recordkeeping requirements for service providers and equipment manufacturers that are subject to Sections 255, 716, and 718 of the Act, and procedures that facilitate the filing of complaints that allege a violation of Section 255, 716, or 718.⁴⁰ Specifically, covered entities must keep records of their efforts to implement Sections 255, 716, and 718, including information about their efforts to consult with people with disabilities, descriptions of the accessibility features of their products and services, and information about the compatibility of these products and services with peripheral devices or specialized CPE commonly used by people with disabilities to achieve access.⁴¹ The Commission may request a copy of those records that are directly relevant to the equipment or service that is the subject of a complaint against a manufacturer or provider.⁴² Covered entities must certify annually to the Commission that they have kept records pertaining to the accessibility of their products.⁴³

13. On October 7, 2011, the Commission released a report and order adopting rules to implement Sections 716 and 717 of the Act.⁴⁴ These rules directed covered manufacturers and service providers to begin taking accessibility into account in the design of their products and services as of January 30, 2012.⁴⁵ Since January 30, 2013, these entities also must comply with Section 717's recordkeeping requirements pertaining to the accessibility of their products and services.⁴⁶ Beginning October 8, 2013, covered entities must fully implement Section 716 by making the products and services they introduce in the marketplace (or that are substantially upgraded) accessible to and usable by individuals with disabilities, or compatible with assistive technology, unless not achievable, in accordance

³⁹ 47 U.S.C. §§ 617(c).

⁴⁰ 47 U.S.C. § 618(a). See Section III.C of this *Report, infra* (describing other requirements under Section 717 of the Act, as well as actions taken by the Commission to implement Section 717 of the Act since the submission of the 2012 CVAA Biennial Report). See also ¶¶ 54-55, *infra* (summarizing the new complaint procedures established by the Commission pursuant to Section 717(a) of the Act).

⁴¹ 47 U.S.C. § 618(a)(5)(A).

⁴² 47 U.S.C. § 618(a)(5)(C).

⁴³ 47 U.S.C. § 618(a)(5)(B).

⁴⁴ *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; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; and In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision*, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-151, 26 FCC Rcd 14557 (2011) (*ACS Report and Order* and *ACS FNPRM*). The rules adopted in the *ACS Report and Order* are codified in 47 C.F.R. Part 14. See also Section III.C of this *Report, infra* (summarizing other actions taken by the Commission with respect to the implementation of Sections 716 and 717 of the Act).

⁴⁵ *ACS Report and Order*, 26 FCC Rcd at 14602, ¶ 108. The rules became effective 30 days after their publication in the Federal Register on December 30, 2011. *Id.*, 26 FCC Rcd at 14696, ¶ 328. See also 76 Fed. Reg. 82240 (Dec. 30, 2011).

⁴⁶ 47 U.S.C. § 618(a)(5)(A).

with the Commission's rules.⁴⁷ Finally, the associated complaint procedures established pursuant to Section 717 of the Act became available to consumers on October 8, 2013.⁴⁸

3. Section 718

14. Section 718 requires mobile phone service providers and manufacturers to make Internet browsers built into mobile phones accessible to and usable by people who are blind or have a visual impairment, unless doing so is not achievable.⁴⁹ This requirement may be satisfied with or without the use of third-party applications, peripheral devices, software, hardware, or CPE that is available to consumers at nominal cost and that individuals with disabilities can access.⁵⁰ On April 26, 2013, the Commission adopted rules implementing Section 718, which require mobile phones with built-in Internet browsers manufactured on or after October 8, 2013, to comply with the Commission's accessibility requirements.⁵¹

4. Scope of this Report

15. The evaluation of compliance with Sections 255, 716, and 718 of the Act in this *Report* is, of necessity, circumscribed by the time periods during which each of the rules described above were in effect. For this *Report*, the Commission provides an assessment of industry compliance with the accessibility requirements of Section 255 since the submission of the *2012 CVAA Biennial Report* and compliance with Sections 716 and 718 with respect to covered equipment and services that have been introduced into the marketplace or substantially upgraded on or after October 8, 2013.⁵² This *Report* also addresses accessibility barriers that still exist with respect to new communications technologies. Finally, this *Report* considers the effect of the accessibility-related recordkeeping and enforcement requirements under Section 717 of the Act on the development and deployment of new communications technologies since these requirements became effective.

16. Pursuant to Section 255 of the Act, since 1999 and 2007, respectively, the Commission has had in place complaint procedures to ensure that telecommunications and interconnected VoIP services and equipment are accessible to and usable by individuals with disabilities.⁵³ Pursuant to Section

⁴⁷ *ACS Report and Order*, 26 FCC Rcd at 14602-3, ¶ 110.

⁴⁸ 47 C.F.R. §§ 14.30(c), 14.32-14.37.

⁴⁹ 47 U.S.C. § 619(a).

⁵⁰ 47 U.S.C. § 619(b).

⁵¹ CVAA, § 104(b); 47 C.F.R. §§ 14.60-61. *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; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; and In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision*, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Second Report and Order, FCC 13-57, 28 FCC Rcd 5957 (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-57A1.pdf (implementing Section 718 and part of Section 716 of the Act to ensure that people with disabilities have access to emerging and innovative advanced communications technologies). See also Section III.C of this *Report*, *infra* (summarizing Commission actions with respect to the implementation of Section 718 of the Act).

⁵² 47 U.S.C. §§ 255, 617, 619; 47 C.F.R. Part 6, Part 7, Part 14.

⁵³ 47 U.S.C. § 255; 47 C.F.R. Part 6 and Part 7. See also *Section 255 Order*, 16 FCC Rcd at 6466-6487, ¶¶ 109-166; *Section 255 VoIP Order*, 22 FCC Rcd at 11289, ¶ 25.

717 of the Act, the Commission established new procedures for complaints alleging violations of Sections 255, 716, or 718 of the Act.⁵⁴ The new complaint procedures became effective October 8, 2013.⁵⁵ As a result, for this *Report*, CGB provides information about complaints alleging violations of Section 255 filed under the prior procedures for the period of January 1, 2012, through October 7, 2013, and about complaints alleging violations of Sections 255, 716, and 718 filed under the new procedures for the period of October 8, 2013, through December 31, 2013.⁵⁶

B. Compliance with Sections 255, 716, and 718

17. Section 717(b)(1)(A) of the Act requires the Commission to provide an assessment of the level of compliance with Sections 255, 716, and 718 of the Act in this *Report*.⁵⁷ To meet this requirement, in the *2014 CVAA Assessment PN*, CGB sought comment on the following matters with respect to products and services made available to the public since the release of the *2012 CVAA Biennial Report* on October 5, 2012:

- The level of compliance with the Commission's accessibility rules predating the CVAA, requiring telecommunications and interconnected VoIP services and equipment to be accessible to people with disabilities;
- The extent to which obligations under Section 716 have impacted the accessibility of advanced communications services (*e.g.*, non-interconnected VoIP and electronic messaging services) and the devices used to access these services;
- The extent to which obligations under Section 718 have impacted the accessibility of Internet browsers built into mobile phones for individuals who are blind or visually impaired;
- Information related to the efforts of manufacturers and service providers to consult with individuals with disabilities in their market research, product design, testing, pilot demonstrations, and product trials;
- The extent to which service providers and equipment manufacturers have complied with their obligations to ensure access by people with disabilities to information and documentation related to their products and services;
- The extent to which covered entities that have direct contact with the public have conducted training of their personnel on the accessibility of their products and services; and
- Any other issues relevant to assessing the level of compliance with Sections 255, 716, and 718.⁵⁸

⁵⁴ 47 C.F.R. §§ 14.32-14.37.

⁵⁵ 47 C.F.R. § 14.30(c).

⁵⁶ 47 U.S.C. § 618(b)(2). As noted in the *2012 CVAA Biennial Report*, we believe it is most appropriate for these periodic reports to review complaints for the time period 1/1/20XX - 12/31/20XX+1. We generally find that this approach allows the Commission adequate time to solicit public comment on the issues that it must address in such reports, consistent with Section 717(b)(2), and best achieves the CVAA's objectives. See *2012 CVAA Biennial Report*, 26 FCC Rcd at 12212, ¶ 16. Limiting the review in this *Report* to complaints received as of December 31, 2013, allowed the Commission to compile the relevant information and to seek comment on our tentative findings.

⁵⁷ 47 U.S.C. § 618(b)(1)(A).

⁵⁸ *2014 CVAA Assessment PN*, 29 FCC Rcd at 7320-7322, ¶¶ 7- 11.

1. Comments Received

18. *Accessibility.* In response to the *2014 CVAA Assessment PN* and the *2014 CVAA Tentative Findings PN*, the Commission received comments from a wide range of stakeholders about the accessibility of telecommunications and advanced communications services, as well as the equipment used for these services. In response to the *2014 CVAA Assessment PN*, Consumer Groups representing individuals who are deaf or hard of hearing generally acknowledge “improvement in accessibility under Section 255,” but add their belief that they “have a long way to go before deaf and hard of hearing customers can easily and affordably purchase accessible phones.”⁵⁹ Additionally, while Consumer Groups express enthusiasm about some new smartphone features, such as Apple’s iPhone that connects directly with some brands of hearing aids, they raise concerns that “those types of proprietary solutions offer limited and expensive options that do not suit everyone’s needs.”⁶⁰ Consumer Groups also raise concerns about accessing captioned telephone services (CTS)⁶¹ over wireless systems and ask the Commission to resolve such problems prior to transitioning consumers away from the wireline infrastructure.⁶² Consumer Groups do, however, emphasize their support for high definition (HD) voice-enabled phones and better noise-cancelling technology, noting that “more natural sounding calls go a long way in making it possible . . . to make calls with or without assistive technology.”⁶³

⁵⁹ Comments of the National Association of the Deaf; Telecommunications for the Deaf and Hard of Hearing, Inc.; Deaf and Hard of Hearing Consumer Advocacy Network; Association of Late-Deafened Adults, Inc.; Hearing Loss Association of America; California Coalition of Agencies Serving the Deaf and Hard of Hearing; Cerebral Palsy and Deaf Organization; and Telecommunication-RERC (Technology Access Program at Gallaudet University and Trace Center at the University of Wisconsin-Madison) (collectively referred to herein as Consumer Groups) (Consumer Groups Comments) at 3.

⁶⁰ Consumer Groups Comments at 2. Consumer Groups point to a new feature for Apple’s iPhone, which offers a direct connection to some brands of hearing aids, and the fact that some hearing aid compatible handsets work better with some hearing aid brands than with others, as examples of the problems inherent in this type of proprietary solution. *Id.*

⁶¹ CTS is a type of telecommunications relay service (TRS) that permits people who can speak, but who have a hearing loss and have difficulty hearing over the telephone, to speak directly to another party on a telephone call and to use a “captioned telephone” or computer software to simultaneously listen to the other party and read captions of what that party is saying. Generally, TRS enables an individual who is deaf, hard of hearing, deaf-blind, or who has a speech disability to engage in communication by wire or radio with one or more individuals in a manner that is functionally equivalent to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services by wire or radio. 47 U.S.C. § 225(a)(3). For more information about TRS, see the FCC consumer guide available at <http://www.fcc.gov/guides/telecommunications-relay-service-trs>.

⁶² Consumer Groups Comments at 9. In particular, Consumer Groups note that CTS often cannot operate without a wireline infrastructure, and that service personnel do not appear to be trained in strategies that permit CTS to function on a purely wireless infrastructure. *Id.* In comments submitted in response to the Commission’s proceeding on the Open Internet, Consumer Groups allege that “standalone analog and IP captioned telephones do not work reliably on telephone services that are provided via wireless base stations.” See Comments of Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI), National Association of the Deaf (NAD), Hearing Loss Association of America (HLAA), Deaf and Hard of Hearing Consumer Advocacy Network (DHHCAN), Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA), Clayton H. Lewis, *Protecting and Promoting the Open Internet*, GN Docket No. 14-28 (Jul. 18, 2014) at 12, available at <http://apps.fcc.gov/ecfs/document/view?id=7521707584>.

⁶³ Consumer Groups Comments at 3.

19. Consumer Groups also reiterate concerns they expressed in 2012 regarding the lack of interoperable video conferencing services.⁶⁴ Specifically, they report that mainstream video conferencing services remain incompatible with telecommunications relay services (TRS), making employment-related video conference calls inaccessible to deaf and hard of hearing individuals.⁶⁵ They explain further that off-the-shelf video conferencing systems are not interoperable among themselves or with videophones available through video relay service (VRS) providers.⁶⁶ Consumer Groups also recommend enhancing video conferencing systems so that, under poor network conditions, a deaf or hard of hearing person can optimize picture quality, or frames-per-second, over audio quality.⁶⁷ Consumer Groups further note the need for accessible alerting systems, such as flashing lights or vibration, for advanced communications services, to prevent consumers from missing incoming video calls or other messages.⁶⁸ In addition, Consumer Groups allege a general lack of access to advanced communications service components in video games and gaming systems and, in particular, they cite the inability of deaf and hard of hearing participants to communicate in multi-player gaming systems.⁶⁹

⁶⁴ See 2012 CVAA Biennial Report, 27 FCC Rcd at 12206, ¶ 29.

⁶⁵ *Id.* at 4-5. See also 2012 CVAA Biennial Report, 27 FCC Rcd at 12206, ¶ 29.

⁶⁶ Consumer Groups Comments at 4-5. VRS is defined in the Commission's rules as "a telecommunications relay service that allows people with hearing or speech disabilities who use sign language to communicate with voice telephone users through video equipment. The video link allows the [communication assistant] to view and interpret the party's signed conversation and relay the conversation back and forth with a voice caller." 47 C.F.R. § 64.601(a)(40). As we noted in the 2014 CVAA Tentative Findings PN, "[i]ssues related to the interoperability of video conferencing services and equipment are the subject of a pending Commission proceeding." 2014 CVAA Tentative Findings PN, 29 FCC Rcd at ___, Attachment n.9 (emphasis added). See also ACS FNPRM, 26 FCC Rcd at 14684-87, ¶¶ 301-305. In its comments in response to the 2014 CVAA Tentative Findings PN, CTIA asserts that the "absence of a definition" of "interoperable" video conferencing service "means that companies do not know what is expected of them in terms of any compliance" and, therefore, complaints that such services are inaccessible are premature. Comments of CTIA – The Wireless Association (CTIA Comments on Tentative Findings) at 3.

⁶⁷ Consumer Groups Comments at 6.

⁶⁸ *Id.*

⁶⁹ *Id.* Consumer Groups raised this issue as well in 2012. See 2012 CVAA Biennial Report, 27 FCC Rcd at 12221-22, ¶¶ 44-45 (advocating for inclusion of relay services to make online gaming voice communication accessible to deaf and hard of hearing gamers). Note, however, that the Commission granted class waivers of the advanced communications services accessibility rules until October 8, 2015, for gaming consoles, services and software. See *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; Petitions for Class Waivers of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advanced Communications Services (ACS) and Equipment by People with Disabilities*, CG Docket 10-213, Order, DA 12-1645, 27 FCC Rcd 12970, 12982-92, ¶¶ 23-41 (CGB 2012) (*ACS Waiver Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1645A1.pdf. In response to the 2014 CVAA Tentative Findings PN, CTIA remarks on the Commission's notes that some concerns raised by consumers are or may be beyond the scope of this Report, outside the Commission's jurisdiction, or subject to waivers from the Commission's accessibility rules. CTIA Comments on Tentative Findings at 6. See also, e.g., nn.105, 225, 226, 229, *infra*. CTIA contends that the Commission's notes do not "clearly distinguish[] which concerns suggest a potential problem with CVAA compliance . . . and which are matters that are not covered by the CVAA but that the accessibility community would like to see addressed in the future." CTIA Comments on Tentative Findings at 6-7. Contrary to CTIA's suggestion, our mention of these concerns does not necessarily suggest "a failure by industry to comply with any CVAA obligations or FCC rules." CTIA Comments on Tentative Findings at 7. Instead, we included these consumers' comments about inaccessible products and services, along with such explanatory notes where appropriate, to provide guidance about the scope of this Report, which, for the benefit of Congress, discusses concerns beyond the scope of what the Commission is required to report on under Section 717(b)(1) of the Act. See *infra* nn.105, 232.

20. In response to the *2014 CVAA Assessment PN*, the American Council of the Blind (ACB) similarly acknowledges that some mobile device platforms have made strides in accessibility, but notes that accessibility gaps continue to exist for individuals who are blind or visually impaired. For example, ACB states that the Samsung Galaxy S5 on the Android platform is more accessible than its predecessors, but insists that earlier versions of these devices, which are still available on the market, as well as other devices on the Android operating system, remain inaccessible.⁷⁰ ACB also notes that Microsoft's Windows Phone, while now offering a built-in screen reader, lacks "many features which would enable it to be usable on a daily basis" for people who are blind or visually impaired; in this regard, they emphasize the need for accessibility to "span the entire device."⁷¹ On a positive note, ACB applauds certain advances for individuals who are blind, such as accessible communication applications that provide two-way, push-to-talk, walkie-talkie voice communication, thereby simulating instant messaging in an accessible format for the blind user.⁷² In addition, ACB notes, in general, that "[w]eb accessibility has improved over the last few years."⁷³

21. In comments in response to the *2014 CVAA Tentative Findings PN*, ACB reports that applications used today to conduct business meetings online are not accessible to screen readers, which negatively impacts on the employment of individuals who are blind or visually impaired.⁷⁴ ACB notes that, notwithstanding accessibility advances that have been made in Android devices, "a person who is blind encounters significant challenges in independently enabling TalkBack, Android's default screen reader,"⁷⁵ and Google's browser, Chrome, is difficult to access using TalkBack on Android devices.⁷⁶ Similarly, progress has been with respect to the accessibility of Windows Phones, but it is not yet clear "how easy and convenient it is to access the mobile web browser on this platform."⁷⁷ ACB asserts that all built-in features should be accessible to individuals who are blind or visually impaired by using screen reader and magnification programs that are available on a device,⁷⁸ and suggests that a comprehensive set

⁷⁰ Comments of the American Council of the Blind (ACB Comments) at 2. ACB advocates for all devices to be accessible, not just a select few. *Id.* ACB reports that it believes that the relationship between the carrier and the original equipment manufacturer (OEM) "is often the reason why accessibility is either obscured or broken on various handsets," and suggests that accessibility can be achieved through "greater communication of expectations from the carrier to the OEM." *Id.*

⁷¹ *Id.*

⁷² ACB points to HeyTell and Zello as examples of these types of applications. *Id.*

⁷³ *Id.* at 3.

⁷⁴ ACB Comments on Tentative Findings at 2.

⁷⁵ *Id.* at 1.

⁷⁶ *Id.* at 2.

⁷⁷ *Id.* at 2-3.

⁷⁸ *Id.* at 1. We note, however, that the accessibility of some features or functions that may be available on devices that are used for advanced communications services, such as information provided through banking applications, fall outside the Commission's jurisdiction. *See* ACB Comments on Tentative Findings at 1. Similarly, ACB notes that "advanced services" are being delivered through set-top boxes, but it is not clear whether any of these services to which ACB alludes fall within the Commission's jurisdiction. ACB Comments on Tentative Findings at 2. We also note that the Commission granted a class waiver of the advanced communications accessibility rules until October 8, 2015, for set-top boxes that are leased by cable operators to their customers. *ACS Waiver Order*, 27 FCC Rcd at 12978-82, ¶¶ 15-22.

of mobile standards for app accessibility is needed.⁷⁹ ACB also reports that consumers are frustrated by a perceived lack of accountability exhibited by providers of operating systems, carriers, and equipment manufacturers with respect to devices that are not accessible.⁸⁰ Likewise, in comments filed in response to the *2014 CVAA Tentative Findings PN*, the American Foundation for the Blind (AFB) acknowledges consumers' "positive views about the quality of the accessibility and usability offered by Apple through its iOS platform,"⁸¹ but it reports that, while the Android platform offers accessibility, implementation by manufacturers and carriers has been inconsistent, and consumers have found it difficult to use Android-based devices.⁸² AFB also reports that "other mobile platforms have lagged in terms of accessibility offerings."⁸³

22. The American Association of the Deaf-Blind (AADB) states, in response to the *2014 CVAA Assessment PN*, that "the majority of smartphones, tablets and other similar devices are not accessible to the Deaf-Blind."⁸⁴ AADB notes that, when using tablets to connect to the Internet or make calls, there is no alert to notify users when the call is received.⁸⁵ Further, AADB reports that "most mobile phones and tablets have limited accessibility features or none at all for screen readers using Braille."⁸⁶ Even when a device is accessible, AADB claims that "the software and apps made for these devices are not always accessible," either because they are only accessible visually or only accessible audibly.⁸⁷ For example, according to AADB, "[i]nstant messaging (IM) on mobile phones is not accessible to screen readers."⁸⁸ A further concern is that, when there are upgrades or updates to a mobile device's core software or apps, it sometimes causes the device or app to become less accessible or totally inaccessible for the user who is deaf-blind.⁸⁹ For example, AADB notes that sometimes such updates cause the equipment or software to stop working with the assistive technology, such as a Braille display or screen reader, that is used by people who are deaf-blind.⁹⁰ This is particularly frustrating, they say, because an update cannot be rolled back, so the product becomes completely useless until fixes are available, "which again require sighted assistance and significant time delays."⁹¹

⁷⁹ ACB Comments on Tentative Findings at 2.

⁸⁰ *Id.* at 1.

⁸¹ Comments of the American Foundation for the Blind (AFB Comments on Tentative Findings) at 2. *See also* ¶ 23, *infra*.

⁸² AFB Comments on Tentative Findings at 2.

⁸³ *Id.*

⁸⁴ Comments of the American Association of the Deaf-Blind (AADB Comments) at 2.

⁸⁵ AADB Comments at 5. ACB agrees and notes that individuals who are deaf-blind are unable to receive notifications that they have received a text or notification on a device, without constantly checking the device itself. ACB Comments at 1.

⁸⁶ AADB Comments at 5. AADB also notes that it can be quite challenging to connect assistive technology, such as Braille displays and notetakers, through Bluetooth to mobile devices. *Id.* at 4.

⁸⁷ *Id.* at 2.

⁸⁸ *Id.* at 5.

⁸⁹ *Id.* at 3.

⁹⁰ *Id.*

⁹¹ *Id.* AADB suggests that its members would benefit from requirements mandating mobile phones to be fully accessible to deaf-blind individuals. *Id.* at 4. Sections 255 and 716 do, in fact, require the telecommunications and advanced communications services functions on mobile phones to be accessible to all persons with disabilities, though flexibility is provided in the manner in which this can be achieved, as noted above. *See* ¶¶ 9-11, *supra*.

23. The Wireless RERC, in response to the *2014 CVAA Tentative Findings PN*, reports that it conducted a study of 215 wireless emergency alert capable devices and found that “the most frequently incorporated accessibility features were voice control to access the phone’s features, voice dialing, and text-to-speech technology.”⁹² While these accessibility features can assist people who are blind, have low vision, cognitive disabilities, or physical disabilities, the Wireless RERC also found that only 3.7% of the devices it evaluated “had full, out-of-the-box accessibility . . . [where] all of the accessibility features evaluated were built into the device’s [operating system].”⁹³ Nonetheless, the Wireless RERC concurs that greater accessibility has been enabled by a platform-based approach,⁹⁴ and reports that the majority of smartphones used by people with disabilities operate on the iOS and Android operating systems.⁹⁵ It also says that care must be taken to ensure that software updates do not disable accessibility.⁹⁶ To avoid such software updates and help achieve full, end-to-end, out-of-the-box accessibility, the Wireless RERC recommends that a company’s accessibility and technical engineers work more closely together.⁹⁷ Further, the Wireless RERC reports that 30% of survey respondents with disabilities are continuing to use basic phones and, as such, there is still a need for accessible cellphones.⁹⁸ The Wireless RERC concludes that, currently, “people with disabilities are limited to a subset of devices that suit their needs . . . [but] may or may not be within their desired price range.”⁹⁹

24. In addition to the above feedback received from disability-related organizations, 25 individuals – all of whom identified themselves as being either blind or low-vision, or as working with this community – submitted comments in response to the *2014 CVAA Assessment PN*.¹⁰⁰ Many of these commenters emphasize the progress that has been made over the past several years on the accessibility of mobile devices, particularly the Apple iPhone, for people with vision loss.¹⁰¹ Two individuals spoke

Similarly, Section 718 requires Internet browsers built into mobile phones to be accessible to individuals who are blind or visually impaired, also as noted above. See ¶ 14, *supra*

⁹² Comments of Georgia Institute of Technology, Center for Advanced Communications Policy (CACP), and the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) (Wireless RERC Comments on Tentative Findings) at 7.

⁹³ *Id.*

⁹⁴ Wireless RERC Comments on Tentative Findings at 9. See also ¶ 25, *infra* (CTIA explaining that the platform-based approach is enabling accessibility features to be more consistently available), ¶ 27, *infra* (TIA asserting that the platform approach leverages the principle of universal design).

⁹⁵ Wireless RERC Comments on Tentative Findings at 10 (reporting that, of the 54% of survey respondents with disabilities who use smartphones, 89% used smartphones that operate on the iOS or Android platform). See also, e.g., ¶ 21, *supra* (AFB remarking on the accessibility of devices operating on the iOS, Android, and other platforms).

⁹⁶ Wireless RERC Comments on Tentative Findings at 10 (stating, as an example, that “changes to multi-touch functionality in Android (4.0 to 4.1) have made the BrailleTouch app not function correctly”).

⁹⁷ *Id.* at 10.

⁹⁸ *Id.* at 9-10.

⁹⁹ *Id.* at 7-8.

¹⁰⁰ We erroneously reported, in the *2014 CVAA Tentative Findings PN*, that 29 individuals filed comments. See *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ___, Attachment ¶ 6. The correct number is 25.

¹⁰¹ See, e.g., Comments of Fred M. Scott; Comments of Jake Joehl; Comments of Tristen and Turlock Breitenfeldt; Comments of Jeanette Schmoyer; Comments of Karen Palau; Comments of Anne Jarry; Comments of Sandy Spalletta.

favorably of the iPhone's compliance with Section 718 of the Act, requiring Internet browsers built into mobile phones to be accessible to individuals who are blind or visually impaired.¹⁰² However, while commenters generally express appreciation for the iPhone's accessibility, some offer suggestions for areas in which accessibility on these devices can be improved.¹⁰³ In addition, several commenters express concerns that wireless phones available to low-income consumers made available by providers who participate in the Commission's Lifeline program are not very accessible,¹⁰⁴ and that some providers still offer no accessible phones at all.¹⁰⁵

25. For the most part, industry stakeholders submitted comments that emphasize their significant efforts to incorporate access into their products and services, along with the consequent results of such efforts. For example, in response to the *2014 CVAA Assessment PN*, CTIA – the Wireless Association (CTIA) points to wireless providers' wide range of devices with "low-end and high-end features, functions, and prices that include accessible features for people with disabilities."¹⁰⁶ It stresses that wireless equipment manufacturers are continuing to improve smartphone accessibility features and create solutions to meet the needs of "people with varying abilities."¹⁰⁷ CTIA identifies several feature phones that provide accessibility solutions, particularly for users who are blind or visually impaired.¹⁰⁸

¹⁰² See Comments of Ronald Flormata at 2 ("Needless to say, I can easily use my iPhone to . . . browse the web. . ."); Comments of Katie Frederick ("When it comes to accessing the Internet/web, I find this process straightforward when using any of my technologies," which include an Apple iPhone.).

¹⁰³ See, e.g., Comments of Al Posner (allow user to set a default magnification level); Comments of Russ Zochowski (provide ability to use Siri to add or edit contacts or delete messages); Comments of Sandy Spalletta (provide ability to locate answer button, phone and keyboard buttons); Comments of Kevin Lee (offer ability to decrease speed of Siri voice).

¹⁰⁴ As discussed below, approximately 15% of all informal complaints and RDAs received during the reporting period involved complaints about inaccessible wireless handsets received in conjunction with subscriptions for telephone services under the Commission's Lifeline program. See ¶ 58, *infra*. Since 1985, the Lifeline program, which is supported by the Universal Service Fund, has provided a discount on phone service for qualifying low-income consumers to ensure that all Americans have the opportunity and security that telephone service brings. In 2005, Lifeline discounts were made available to qualifying low-income consumers on pre-paid wireless service plans, in addition to traditional landline service. See "Lifeline Program for Low-Income Consumers" at <http://www.fcc.gov/lifeline> (last viewed Oct. 3, 2014).

¹⁰⁵ See, e.g., Comments of Andrea Roth ("Assurance Wireless phones that are provided for low-income individuals, are not very accessible. It would be better if they at least had voice-dialing capability."); Comments of Percy Chavez (telephones from prepaid wireless provider "are not accessible at all"). A number of the commenters noted concerns that are outside the scope of what the Commission is required to report on under Section 717(b)(1) of the Act, but which we nonetheless include for the benefit of Congress. See *infra* n.232. For example, some commenters expressed concern regarding the inaccessibility of websites (see, e.g., Comments of Al Posner; Comments of Larry McMillan; Comments of Kevin Lee; Comments of Ronald Kaplan); inaccessibility of software applications (see, e.g., Comments of Rhonda Staats; Comments of Karen Palau); and, generally, the overutilization of touch screen and touch pad input devices on household appliances and other devices (see, e.g., Comments of Al Posner; Comments of Ron Kolesar).

¹⁰⁶ Comments of CTIA – the Wireless Association (CTIA Comments) at 8.

¹⁰⁷ CTIA Comments at 9.

¹⁰⁸ *Id.* at 15-17. CTIA mentions Pantech's Breeze flip phones that utilize universal design principles, and Sprint's Kyocera Kona, Verve, and Duraplus phones that offer a variety of accessibility features. *Id.* at 15-16. In addition, CTIA points to new offerings that focus specifically on the delivery of wireless services to people with disabilities, such as GreatCall, which specializes in products and services designed for seniors, as well as Odin Mobile and Project RAY, which market services and offer accessible phones to individuals who are blind or visually impaired. *Id.* at 16-17.

CTIA goes on to explain that the move to a platform-based approach by manufacturers is enabling accessibility features to be more consistently available, because accessibility features in the operating system can be used by low- and high-end devices, and new features can be distributed through software updates.¹⁰⁹ For example, CTIA discusses features offered on smartphone platforms for users who are blind or have low vision,¹¹⁰ who are deaf or hard of hearing,¹¹¹ who have dexterity impairments,¹¹² and who have cognitive disabilities.¹¹³ In addition, CTIA mentions personal assistant programs that facilitate mobile device operations for people of varying abilities.¹¹⁴

26. CTIA also describes the development of services by providers and applications by third parties that can enhance accessibility.¹¹⁵ It notes that service providers' mobile accessibility applications and services provide a variety of means to ensure that consumers can find and use innovative accessibility solutions.¹¹⁶ It also cites manufacturers' increased willingness to provide resources to enable third-party application developers to ensure compatibility with built-in accessibility features.¹¹⁷ Finally, CTIA notes

¹⁰⁹ *Id.* at 9-10.

¹¹⁰ *Id.* at 10-12. CTIA cites, as examples, Apple's VoiceOver screen reader and platform support for more than 40 refreshable Braille displays; Google's Android operating system with a built-in TalkBack screen reader that also offers Explore by Touch (audible output activated by touching the screen) and BrailleBack (to help make supported refreshable Braille displays via Bluetooth); Blackberry 10's operating system that includes screen reader software, BlackBerry Magnify, and voice control; Microsoft's Windows Phone 8.1 that offers the Narrator screen reader and hands-free operation by voice control. *Id.* at 10-11. CTIA also reports that manufacturers, such as Nokia, include built-in accessibility features in their products, including voice controls, adjustable fonts, text-to-speech, Nuance Talks, screen readers, and message readers. *Id.* at 11. CTIA also mentions HTC's adjustable font sizes for e-mail and webpages; Samsung's Galaxy 5's Dark Screen option; LG G2's built-in screen magnifier; and Motorola Moto X's combined screen reader with a Braille display. *Id.* at 11-12. Additional accessibility features for individuals who are blind or visually impaired are offered by service providers, such as Sprint's "Accessible Now" voice guidance software to help set up and activate its LG F3, Flex, and G2 phones. *Id.* at 12.

¹¹¹ *Id.* at 12-13. CTIA reports that, in addition to hearing aid compatibility and volume control, many wireless devices include visual and vibrating alerts for calls, texts, e-mails, and other notifications. *Id.* at 12. In addition, smartphones with front-facing cameras enable video communication by American Sign Language users. *Id.* at 13. According to CTIA, Motorola devices offer CrystalTalk (a noise-masking algorithm); and Blackberry devices offer a Natural Sound feature (to hear nuances and variations in tone). *Id.* at 13.

¹¹² *Id.* at 13-14. For example, CTIA mentions "dexterity features, such as 'no slip' coatings, external stylus support, external keyboard support, predictive text (auto-correct), voice commands, and Bluetooth connectivity." *Id.* at 13. According to CTIA, HTC offers smartphones with haptic feedback; Apple offers AssistiveTouch to suit an individual's physical needs and to support third-party assistive technology, such as Bluetooth-enabled switch hardware; and Google's Android offers Touch and Hold Delay and TalkBack speech features. *Id.* at 13-14.

¹¹³ *Id.* at 14. Features that are useful for individuals with cognitive disabilities include photo contact lists, voice dialing and operations, and options to eliminate screen time-outs. *Id.* CTIA mentions that Pantech's Breeze phones have simplified display options and Samsung offers an "easy" mode on its Android-based smartphones. *Id.*

¹¹⁴ *Id.* at 14. For example, CTIA points to Apple's Siri program that responds to voice commands and Microsoft's Windows Phone Cortana application that can be accessed by voice or by text. *Id.* at 14-15.

¹¹⁵ *Id.* at 18-24.

¹¹⁶ *Id.* at 18-20.

¹¹⁷ *Id.* at 20-21, 23-24.

that third-party developers have taken the initiative to release imaginative applications to enhance accessibility for people with disabilities.¹¹⁸

27. In response to the *2014 CVAA Assessment PN*, both CTIA and the Telecommunications Industry Association (TIA) describe the efforts of some of their member companies to make text-to-911 available.¹¹⁹ TIA goes on to opine that the CVAA has resulted and will continue to result in increased accessibility across information and communications technology products and services, though it might be difficult to quantify at this time.¹²⁰ TIA further believes that the software platform approach for inclusion of accessibility features leverages the principle of universal design, allowing new features to be added to existing equipment, to provide a more seamless user experience, and greatly simplify upgrades.¹²¹ With respect to the state of accessibility for “non-mobile” services, TIA urges the Commission to act on TIA’s 2012 petition for a rulemaking to reference the TIA conversational gain standard in the Commission’s Part 68 rules that set hearing aid compatibility volume control requirements.¹²² TIA also describes its efforts to work on hearing aid compatibility standards for the wireless space.¹²³

28. The Consumer Electronics Association (CEA) reports, in response to the *2014 CVAA Assessment PN*, that it has been assisting its members to comply with the new accessibility rules through alerts, webinars, and compliance manuals.¹²⁴ CEA states that its members are engaging in “strong efforts to comply” with the CVAA, including determining which equipment is subject to the advanced communications services accessibility rules, ensuring that their units and teams understand the rules, consulting with people with disabilities on accessibility solutions, modifying internal processes to perform the tasks needed for compliance, and keeping compliant record systems.¹²⁵ Finally, CEA notes with approval the Commission’s advanced communications services accessibility rules, which it says, recognize the need to balance accessibility and preserve innovation.¹²⁶

¹¹⁸ *Id.* at 21-23. In its comments, CTIA mentions applications that improve the accessibility of mobile devices, as well as applications that assist with productivity, such as apps that identify currency, colors, and images. *Id.*

¹¹⁹ *Id.* at 24-25 (pointing to efforts by AT&T, Sprint, T-Mobile, and Verizon Wireless to carry text-to-911 transmissions); Comments of the Telecommunications Industry Association (TIA Comments) at 8-9 (noting its work with standards groups to enable text-to-911).

¹²⁰ TIA Comments at 4.

¹²¹ *Id.* at 5-6.

¹²² *Id.* at 7-8. *See also* Telecommunications Industry Association, Access to Telecommunications Equipment and Services by Persons with Disabilities, RM-11682, Petition for Rulemaking (filed Oct. 25, 2012) (TIA Petition).

¹²³ TIA Comments at 8.

¹²⁴ Comments of the Consumer Electronics Association (CEA Comments) at 4.

¹²⁵ CEA Comments at 5. CEA describes implementation of the accessibility requirements as “resource intensive and time-consuming.” *Id.* at 4-5. Asserting, without more, that “smaller entities have encountered challenges in achieving compliance,” CEA recommends an exemption for small entities, “which will facilitate the entry and continued participation of small entrepreneurial businesses in providing innovative [advanced communications services and] equipment.” *Id.* at 5.

¹²⁶ *Id.* at 3. CEA also expresses appreciation for the Commission’s grant of limited waivers. *See ACS Waiver Order*, 27 FCC Rcd 12970 (granting class waivers of advanced communications services accessibility rules until October 8, 2015, for Internet protocol-enabled television sets, Internet-enabled digital video players, cable set-top boxes, and gaming consoles, services and software). *See also* TIA Comments at 9-10 (expressing appreciation for the Commission’s careful consideration of past waiver requests relating to the advanced communications services accessibility requirements).

29. In response to the *2014 CVAA Assessment PN*, Microsoft, Inc. (Microsoft) states that innovation in accessibility solutions has been enhanced by the Commission's avoidance of overly prescriptive regulations, and by a reasonable compliance deadline schedule that has provided industry time to research break-through solutions.¹²⁷ Microsoft points to developments it has advanced, such as hands-free interaction modes, eye-tracking technology, and narration of visual environments, as examples of these types of innovations.¹²⁸ Microsoft states that it faces unique challenges, in that its portfolio of devices and services spans such a wide range of accessibility issues, and runs on multiple combinations of platforms, browsers, apps, and services, but that it is able to meet these accessibility challenges through a significant company-wide emphasis on accessibility.¹²⁹ With respect to advanced communications services, Microsoft reports that it has been able to provide consumers with disabilities a choice of using built-in or third-party accessibility solutions.¹³⁰ For example, consumers with visual impairments can choose to use Narrator, a built-in screen reader, or Window-Eyes, a third-party screen reader that Microsoft makes available at no charge.¹³¹ Microsoft applauds the Commission's efforts to foster industry innovation and flexibility, encourages the Commission to continue its Chairman's Awards for the Advancement of Accessibility and its Accessibility & Innovation Initiative Speaker Series, and urges the Commission to continue to focus on outcomes and encourage innovation, relying on technology standards only as a safe harbor "where compliance with the standard will be evidence of complying with the CVAA regulations, while still allowing other methods of achieving the regulatory goals."¹³²

30. *Inclusion of people with disabilities in product and service design and development.*¹³³ The *2014 CVAA Assessment PN* sought comment on the extent to which covered entities have included people with disabilities in their efforts to conduct market research, product design, testing, pilot demonstrations, and product trials.¹³⁴ In response, Consumer Groups allege that "re-engineering happens too often without thought to [the] accessibility needs of people who are deaf or hard of hearing."¹³⁵ As an example, they point to reports that Apple is considering elimination of the headphone jack on future models, a feature that enables a connection for neckloops or other accessibility coupling devices that are used to enhance an individual's ability to hear, as illustrative of this problem.¹³⁶ AADB similarly raises concerns about consumers with disabilities having insufficient opportunity to provide input into research and development of new communications technologies to meet the needs of their community.¹³⁷ In

¹²⁷ Comments of Microsoft, Inc. (Microsoft Comments) at 1.

¹²⁸ Microsoft Comments at 2-3.

¹²⁹ *Id.* at 5-7.

¹³⁰ *Id.* at 4.

¹³¹ *Id.*

¹³² *Id.* at 7-8.

¹³³ See 47 C.F.R. §§ 6.7(b)(3), 7.7(b)(3). Beginning January 30, 2013, covered entities must keep records about their efforts to consult with people with disabilities. See 47 U.S.C. § 618(a)(5)(A); 47 C.F.R. § 14.31(a)(1).

¹³⁴ *2014 CVAA Assessment PN*, 29 FCC Rcd at 7320-7322, ¶¶ 7, 9, 10.

¹³⁵ Consumer Groups Comments at 3.

¹³⁶ *Id.* at n. 3, citing "Possible Design Change for the iPhone 6 – Eliminating the Headphone Jack – Has Some Apple Fans Fuming," NY Daily News, <http://www.nydailynews.com/life-style/iphone-6-require-new-headphones-apple-fans-fuming-article-1.1826371> (Jun. 12, 2014) (last viewed Oct. 3, 2014).

¹³⁷ AADB Comments at 4. Along these lines, AADB raises concerns about the transparency of the National Deaf-Blind Equipment Distribution Program (NDBEDP), a matter outside the scope of this *Report*, but nevertheless of

particular, AADB calls for a Deaf-Blind Telecommunications Technology Summit to address the challenges facing deaf-blind people using telecommunications equipment and services.¹³⁸

31. Various industry associations report that their members are, in fact, taking steps to consult with people with disabilities and the accessibility community. For example, CTIA reports that, since 2012, its member companies have gained feedback on wireless accessibility issues from disability-related organizations,¹³⁹ and that its Accessibility Outreach Initiative, which has held seven meetings since 2013, assists its members to “gain a broader understanding of the accessibility community’s priorities.”¹⁴⁰ CTIA adds that service providers “have developed programs to consider accessibility throughout all stages of product and service design and deployment.”¹⁴¹ It also points to efforts of its member companies to engage consumer representatives in an on-going dialogue about accessibility, including initiatives to incorporate accessibility into regular company practices and procedures.¹⁴² For example, CTIA reports that manufacturers have worked to implement the American Foundation for the Blind’s guidelines for small screen displays.¹⁴³ CTIA also notes that wireless service providers have undertaken initiatives to incorporate accessibility into their regular practices and procedures, such as through advisory panels and online resources.¹⁴⁴

32. TIA states that it views the inclusion of people with disabilities to be a crucial part of the process of ensuring that accessibility is incorporated into the design during new product cycles, and that its members continue to liaise with the disability community to ensure inclusive design.¹⁴⁵ TIA asserts that consultation with individuals with disabilities on research and development is taking place at both the company and industry association levels.¹⁴⁶

33. Microsoft reports that it places company-wide emphasis on accessibility and engages regularly with the community on disability issues.¹⁴⁷ For example, Microsoft states that it holds an annual summit with Microsoft employees and disability rights advocates.¹⁴⁸ In addition, Microsoft explains that

importance to the Commission. AADB expresses interest in having greater access to trends, patterns and statistics of programs certified under the NDBEDP, to better identify research needed for the development of communications devices for the deaf-blind community. *Id.*

¹³⁸ *Id.* at 5.

¹³⁹ CTIA Comments at 28. For example, CTIA member companies have met with the American Foundation for the Blind, Hearing Loss Association of America, the Telecommunications Equipment Distribution Program Association, the National Association of the Deaf, the World Institute on Disability, and Telecommunications for the Deaf and Hard of Hearing, Inc. *Id.* at 28.

¹⁴⁰ *Id.* at 28.

¹⁴¹ *Id.* at 8. CTIA mentions, specifically, the establishment of a Corporate Accessible Technology Office by AT&T, and Verizon’s online training courses for new employees about accessibility requirements. *Id.* at 8-9.

¹⁴² *Id.* at 30-32.

¹⁴³ *Id.* at 12.

¹⁴⁴ *Id.* at 31-32.

¹⁴⁵ TIA Comments at 4-5.

¹⁴⁶ *Id.* at 6. TIA mentions, for example, that it participated in sessions at the 2014 M-Enabling Summit in Virginia and the 2014 conference of the Hearing Loss Association of America. *Id.*

¹⁴⁷ Microsoft Comments at 7.

¹⁴⁸ *Id.* at 6.

it hires individuals with disabilities as usability testers in studies to obtain feedback on the usability of its products.¹⁴⁹

34. *Information, documentation, and training.* The *2014 CVAA Assessment PN* sought comment on access by people with disabilities to information and documentation related to covered products and services, as well as the extent to which covered entities that have direct contact with the public have conducted training of their personnel on the accessibility of their products and services.¹⁵⁰ These requirements are designed to ensure that telecommunications and advanced communications services, as well as Internet browsers built into mobile phones, are *usable by* individuals with disabilities.¹⁵¹ Consumer Groups express concern that gaps remain, both with respect to industry efforts to disseminate information about accessible products and services, and with respect to providing staff training on accessibility. Specifically, Consumer Groups assert that “[t]here continues to be a lack of readily available information in retail settings to help customers figure out which phone works best for them,” and that retail employees are often unable to assist because they are unfamiliar with accessibility features, such as hearing aid compatible phones.¹⁵² Wireless RERC, in response to the *2014 CVAA Tentative Findings PN*, reports that less than 30% of survey respondents with hearing loss found it easy or very easy to find a cellphone that works with their hearing aid, cochlear implant, or other technology.¹⁵³ It also notes that a common theme of discussion with the disability community is that customer support service agents lack the expertise needed to resolve their issues.¹⁵⁴ AADB agrees that “[e]ducation and outreach about accessibility on all mobile and desktop communications is much needed and critical.”¹⁵⁵ It also requests easy-to-use, step-by-step instructions to enable deaf-blind individuals to navigate communication apps.¹⁵⁶ Similarly, in response to the *2014 CVAA Tentative Findings PN*, ACB suggests that, if accessible feature phones are available, better marketing is needed to meet the needs of individuals who do not want or cannot afford the cost of a smartphone.¹⁵⁷ AFB reports that “[c]onsumers continue to report that they struggle to find the accessible products that do exist, and there continues to be a failure at critical points along the sales, marketing and customer service chain to be aware of and communicate

¹⁴⁹ *Id.*

¹⁵⁰ *2014 CVAA Assessment PN*, 29 FCC Rcd at 7320-22, ¶¶ 8, 11.

¹⁵¹ A product or service is “usable” if individuals with disabilities have access to the full functionality and documentation for the product or service, including instructions, product or service information (including accessible feature information), documentation and technical support functionally equivalent to that provided to individuals without disabilities. *See* 47 C.F.R. §§ 6.3(l), 7.3(l), 14.21(c). *See also* 47 C.F.R. §§ 6.11, 7.11, 14.20(d), 14.60(b)(4) (prescribing usability obligations related to information, documentation, and training for covered entities).

¹⁵² Consumer Groups Comments at 2.

¹⁵³ Wireless RERC Comments on Tentative Findings at 3. Wireless RERC reports that “only 21% of respondents indicated that they were satisfied or very satisfied with the information found on provider and manufacturer websites and packaging, and 17% were satisfied or very satisfied with the information received from retail staff.” *Id.* at 2-3.

¹⁵⁴ *Id.* at 5. Wireless RERC also encourages industry to provide customer service support by video in American Sign Language (ASL), the primary language of many individuals who are deaf or hard of hearing, similar to the “ASL Consumer Support Line” established by the Commission. *Id.* at 5-6. *See also* Section III.C of this *Report, infra*.

¹⁵⁵ AADB Comments at 5.

¹⁵⁶ *Id.* at 3.

¹⁵⁷ ACB Comments on Tentative Findings at 2.

accurate information about accessible features and functions.¹⁵⁸ AFB asserts that “a company’s provision of accurate and up-to-date information about their products’ usability by people with disabilities is just as essential as their provision of accessible equipment and services; consumers cannot have one without the other.”¹⁵⁹

35. Industry commenters underscore their efforts to disseminate information to consumers with disabilities. For example, CTIA stresses that its member companies provide accessibility information through advertisements, product packaging, user guides, and their websites, as well as through customer service representatives.¹⁶⁰ It states that the industry and individual providers have increased awareness of accessible services and products to an extent that goes beyond the requirements of the CVAA, including regular attendance at conferences and meetings, along with maintenance of the AccessWireless.org website, where consumers can search for wireless handsets based on accessibility features.¹⁶¹

36. With respect to staff training, Microsoft reports that it has established a “disability Answer Desk” that consumers can contact by phone, e-mail, or chat to receive assistance from staff “specifically trained in assistive technologies and assisting persons with disabilities.”¹⁶²

37. *Other issues.* Consumers point to several aspects of service plans offered by providers that they claim result in reduced accessibility for users with disabilities. Consumer Groups, whose members rely on data-based rather than voice-based communication, express serious concern about “the growing trend among wireless carriers where they are no longer offering unlimited data plans and are instead metering, throttling and sometimes capping their data plans.”¹⁶³ Consumer Groups claim that because some modes of communication, particularly video conferencing, use significant amounts of data, such restrictions limit functional equivalency for deaf and hard of hearing users and result in their paying more for expensive overage charges and costly data plans.¹⁶⁴ Moreover, Consumer Groups point to news reports causing growing apprehension that one or more major carriers may begin throttling data speeds for customers with unlimited data plans, or may begin capping consumers’ data usage.¹⁶⁵ Their concerns are that throttling data speed would render video communication impossible and data caps could result in sudden blockages to the network; either action, they say, could render a person who is deaf or hard of hearing unable to make calls, including calls for emergency services.¹⁶⁶

¹⁵⁸ AFB Comments on Tentative Findings at 2.

¹⁵⁹ *Id.*

¹⁶⁰ CTIA Comments at 17-18.

¹⁶¹ *Id.* at 26-30. CTIA partners with the Mobile Manufacturers Forum to make the information collected through the Global Accessibility Reporting Initiative (GARI) available to consumers through AccessWireless.org website. CTIA Comments at 27. *See also* TIA Comments at 8 (asserting that GARI continues to operate successfully) and 11 (stating that GARI is being used effectively by wireless manufacturers and is also leveraged effectively by the Commission’s Accessibility Clearinghouse).

¹⁶² Microsoft Comments at 6.

¹⁶³ Consumer Groups Comments at 7-8.

¹⁶⁴ *Id.* at 7.

¹⁶⁵ *Id.* at 8, citing “FCC Questions Verizon Plan to Manage Data Speeds for Some Customers,” Wall Street Journal, <http://online.wsj.com/articles/fcc-questions-verizon-plan-to-manage-data-speeds-for-some-costumers-1406756051> (Jul. 30, 2014) (last viewed Oct. 3, 2014).

¹⁶⁶ Consumer Groups Comments at 8.

38. By contrast, industry comments emphasize the wide selection of service plans tailored to fit the needs of users with disabilities. For example, CTIA points to providers' service plans that "meet the needs of people with disabilities," and offer "a variety of post- and pre-paid plans to accommodate differing abilities to pay."¹⁶⁷ It states that wireless service providers continue to "offer and expand their array of services that benefit the accessibility community, including by introducing voice, text, data and service plans that greatly benefit people with disabilities and seniors."¹⁶⁸

2. Findings on Compliance with Sections 255, 716, and 718¹⁶⁹

39. In the *2014 CVAA Tentative Findings PN*, we tentatively found that, since the *2012 CVAA Biennial Report*, there has been an increase in the availability of telecommunications equipment with varying degrees of functionality and features, and offered at differing price points, that are accessible to individuals with disabilities.¹⁷⁰ With respect to compliance with Sections 716 and 718, we tentatively found that the lack of requests for assistance or informal complaints is not conclusive evidence of compliance; nor can it be used to infer compliance.¹⁷¹ Nonetheless, we also tentatively found that industry has made efforts to ensure that advanced communications services and the equipment used for these services are accessible to people with disabilities, and that Internet browsers built into mobile phones are accessible to individuals who are blind or visually impaired.¹⁷² While progress has been made to meet the accessibility obligations of Sections 255, 716, and 718, we nevertheless tentatively concluded that some accessibility gaps still exist and others have the potential to occur or reoccur.¹⁷³ We further tentatively found that, while some efforts to consult with individuals with disabilities have occurred over the past two years, more can be done to include people with disabilities early on in the design and development of advanced communications products and services.¹⁷⁴ Finally, we tentatively found that industry has engaged in some efforts to ensure the availability of information about accessible products and services, including training personnel, but that gaps remain in the usability of these offerings.¹⁷⁵ Below we discuss these various findings, which we affirm based on both the initial input received from commenters in response to the *2014 CVAA Assessment PN* and more recently, comments received in response to the *2014 CVAA Tentative Findings PN*.

40. *Section 255*. Based on the record before us, we find that there is a greater selection of accessible telecommunications devices available to people with disabilities now than were available at the

¹⁶⁷ CTIA Comments at 8.

¹⁶⁸ *Id.* at 7. CTIA points to Sprint's "Relay Data Plan," AT&T's "Text Accessibility Plan" and "Senior Plan 200," Verizon's "Nationwide Messaging Plan" and "Nationwide 65 Plus Plan," U.S. Cellular's messaging options and messaging-only plans, and providers' HD Voice services as examples of services that benefit people with disabilities and seniors. *Id.* at 7-8.

¹⁶⁹ As noted above, the Commission sought comment on these findings pursuant to Section 717(b)(2) of the Act. *See* ¶ 6, *supra*.

¹⁷⁰ *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ___, Attachment ¶ 21.

¹⁷¹ *Id.*, 29 FCC Rcd at ___, Attachment ¶¶ 22-23.

¹⁷² *Id.*

¹⁷³ *Id.*, 29 FCC Rcd at ___, Attachment ¶ 24.

¹⁷⁴ *Id.*, 29 FCC Rcd at ___, Attachment ¶ 25.

¹⁷⁵ *Id.*, 29 FCC Rcd at ___, Attachment ¶ 26.

time that the Commission prepared its *2012 CVAA Biennial Report*. Specifically, the *2012 CVAA Biennial Report* stated that “feature phones continue to offer only limited accessibility for consumers who are blind or visually impaired.”¹⁷⁶ Information provided to the Commission in preparation for this *Report* indicates that several feature phones now provide accessibility solutions for individuals who are blind or visually impaired and that the need for accessibility has given rise to new offerings and models specifically designed to meet accessibility needs.¹⁷⁷ In addition, it appears that a range of accessibility solutions have been included in many smartphones to meet the needs of individuals who are blind or have low vision, who are deaf or hard of hearing, who have dexterity impairments, and who have cognitive disabilities.¹⁷⁸ As such, we find that there has been an increase in the availability of telecommunications equipment with varying degrees of functionality and features, and offered at differing price points, that are accessible to individuals with disabilities during the period covered by this *Report*.

41. *Section 716*. Although less than a year has passed since implementation of Section 716 went into full effect, we find that industry has made efforts to comply with the CVAA’s requirements to ensure that advanced communications services and the equipment used for these services are accessible to people with disabilities. We base this finding on the extensive submissions illustrating a range of accessible devices, from feature phones to smartphones, for individuals with varying types of disabilities,¹⁷⁹ along with reports by trade associations detailing industry compliance efforts.¹⁸⁰ While we note that consumers did not request assistance or file informal complaints with the Commission with respect to alleged violations of Sections 716 from October 8, 2013 through the close of the reporting period on December 31, 2013,¹⁸¹ we emphasize that we do not base our conclusion on the lack of filings during this three-month period. We believe that such lack of filings may be due to many reasons, none of which are evidenced in the record.¹⁸² AFB agrees with this assessment, and suggests that such lack of

¹⁷⁶ *2012 CVAA Biennial Report*, 27 FCC Rcd at 12219, ¶ 39.

¹⁷⁷ See ¶ 25, n.108, *supra* (CTIA reporting that Pantech’s Breeze and Sprint’s Kyocera Kona, Verve, and Duraplus feature phones have accessibility features, and that GreatCall, Odin Mobile, and Project RAY market services and offer accessible phones to seniors and individuals who are blind or visually impaired).

¹⁷⁸ See ¶ 25, *supra* (CTIA stating that wireless providers offer a wide range of devices with “low-end and high-end features, functions, and prices that include accessible features for people with disabilities”), nn.110-113, *supra* (CTIA discussing features that make the telecommunications services functions on smartphones more accessible to individuals with disabilities). See also ¶ 18, *supra* (Consumer Groups noting “improvement in accessibility under Section 255” and support for HD voice-enabled phones and better noise-cancelling technology); ¶ 20, *supra* (ACB acknowledging that some mobile platforms now provide greater accessibility, including voice communication applications, that are accessible to individuals who are blind or visually impaired).

¹⁷⁹ See, e.g., ¶ 25, n.108, *supra* (CTIA discussing accessible feature phones and new entities that market services and offer accessible phones to seniors and individuals who are blind or visually impaired); ¶ 25, nn.110-113, *supra* (CTIA reporting on features that make the advanced communications services functions on smartphones more accessible to individuals with disabilities).

¹⁸⁰ See, e.g., ¶ 28, *supra* (CEA reporting that its members are actively engaged in efforts to comply with the Commission’s advanced communications services accessibility rules); ¶ 29, *supra* (Microsoft noting that it provides consumers with disabilities a choice of built-in or third-party accessibility solutions).

¹⁸¹ See ¶ 57, *infra*. Consumers were permitted to request assistance or file informal complaints with the Commission with respect to alleged violations of Sections 716 beginning October 8, 2013. See ¶¶ 54-55, *infra*.

¹⁸² For example, there is no evidence in the record as to what covered services and equipment were deployed during that three-month period. Further, consumers may not be aware of the accessibility requirements mandated by Section 716 of the Act and the Commission’s rules, or of possible violations of those requirements, or of their right to request assistance from or to file complaints with the Commission with respect to the inaccessibility of advanced communications services and equipment.

complaints may be due to a lack of awareness by consumers about the new complaint procedures.¹⁸³ Similarly, ACB agrees that the Commission should not make any conclusions based on the lack of informal complaints filed during this period.¹⁸⁴ As such, we find that the lack of such requests for assistance or informal complaints is not conclusive evidence of compliance, nor can it be used to infer compliance with Section 716.

42. *Section 718.* While only a few commenters spoke directly to the accessibility of Internet browsers built into mobile phones in response to the *2014 CVAA Assessment PN*, based on the record before us, we conclude that industry has made efforts to comply with Section 718's requirements to ensure the accessibility of such web browsers for people who are blind or visually impaired. We base this finding on CTIA's reports of a wide range of wireless devices and smartphone platforms that provide "low-end and high-end features, functions, and prices that include accessible features for people with disabilities" generally,¹⁸⁵ and more specifically for users who are blind or visually impaired. In particular, CTIA describes smartphones that support refreshable Braille displays and include screen readers, voice control, text-to-speech, adjustable font sizes, and magnification.¹⁸⁶ Given that smartphones can be used to access the Internet, it seems logical to conclude that the accessibility features provided on these devices not only enable people to make calls, but also enable access to the Internet browsers built into these smartphones. This finding is supported by comments that confirm the accessibility of Internet browsers on Apple iPhones,¹⁸⁷ as well as ACB's statement that "[w]eb accessibility has improved over the last few years."¹⁸⁸ Our conclusion that industry is effectively providing access to Internet browsers on mobile phones is further supported by the absence in this record of comments specifically to the contrary; *i.e.*, no commenter reported that this remains a problem for people who are blind or visually impaired.¹⁸⁹ As was the case for Section 716,¹⁹⁰ we note that the Commission received no requests for dispute assistance or informal complaints concerning potential violations of Section 718 since it became effective on October

¹⁸³ AFB Comments on Tentative Findings at 2. AFB maintains that the Commission should do more to raise such awareness, a responsibility that "is not the primary burden of organizations of and for people with disabilities to assume." *Id.* As discussed below, the Commission has undertaken a number of efforts in this regard. See ¶ 87, *infra* (describing actions taken by Commission staff to inform the public about the protections and remedies available under Sections 255, 716, and 718 of the Act, as required by Section 717(e) of the Act). See also *New Procedures for Telecommunications and Advanced Communications Accessibility Complaints*, Public Notice, DA 13-2177, 28 FCC Red 15712 (CGB 2013) (*Complaint Procedures Notice*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-2177A1.pdf. AFB suggests that this *Report* should affirm the Commission's commitment to meeting its responsibility for consumer outreach and education and "ask the Congress for all appropriate help in doing so." AFB Comments on Tentative Findings at 2. We will continue to conduct outreach to the public, consistent with our obligations under Section 717(e) of the Act.

¹⁸⁴ ACB Comments on Tentative Findings at 2.

¹⁸⁵ CTIA Comments at 8.

¹⁸⁶ See *id.* at 10-12. See, generally, ¶ 25, nn.108, 110, *supra* (CTIA discussing accessible feature phones and new entities that market services and offer accessible phones to seniors and individuals who are blind or visually impaired; CTIA reporting on features that make the advanced communications services functions on smartphones more accessible to individuals who are blind or visually impaired).

¹⁸⁷ See ¶ 24, n.102, *supra*. Other individuals similarly commented on the accessibility of mobile devices, particularly the Apple iPhone, a mobile phone with a built-in Internet browser. See ¶ 24, *supra*.

¹⁸⁸ ACB Comments at 3. See also ¶ 20, *supra*.

¹⁸⁹ *But see* ¶ 20, *supra*. ACB states that, even with a built-in screen reader, not all of the Windows Phone features are accessible. *Id.* ACB does not, however, identify the Internet browser as one of those inaccessible features.

¹⁹⁰ See ¶ 41, *supra*.

8, 2013, through the close of the reporting period on December 31, 2013.¹⁹¹ For the same reasons as noted above, the lack of requests for assistance or complaints filed during this three-month period may be due to many reasons, none of which are evidenced in the record.¹⁹² As such, we find that the lack of such requests for assistance or informal complaints is not conclusive evidence of compliance, nor can it be used to infer compliance with Section 718.

43. *Accessibility gaps.* While the record demonstrates progress with respect to meeting the accessibility obligations of Sections 255, 716, and 718, we nevertheless conclude that some accessibility gaps still exist and others have the potential to occur or reoccur. As discussed above, consumers report the lack of accessible alerting systems for incoming video calls and other messages.¹⁹³ They also raise concerns about technology transitions that could threaten accessibility that now exists,¹⁹⁴ and urge that more needs to be done to allow their participation early on in the development of products and services to ensure that their accessibility needs are met.¹⁹⁵ Similarly, although ACB and AFB each concur that advances have been made with respect to the accessibility of devices used for advanced communications services, in response to the *2014 CVAA Tentative Findings PN*,¹⁹⁶ they report numerous accessibility gaps still exist with respect to applications used to conduct business meetings online, and using Android-based devices and other non-iOS mobile platforms.¹⁹⁷ Additionally, while we concur with industry that platform-based technology has the advantage of enabling the distribution of accessibility features through software updates,¹⁹⁸ we note that where accessibility is not a factor designed into software updates, there

¹⁹¹ See ¶ 57, *infra*.

¹⁹² For example, there is no evidence in the record as to what mobile phones with built-in Internet browsers were deployed during that three-month period. Further, consumers may not be aware of the accessibility requirements mandated by Section 718 of the Act and the Commission's rules, or of possible violations of those requirements, or of their right to request assistance from or to file complaints with the Commission with respect to the inaccessibility of Internet browsers built into mobile phones.

¹⁹³ See ¶ 19, *supra* (Consumer Groups noting the need for accessible alerting systems for incoming video calls or other messages). Wireless RERC reports that it is working to find ways to provide access to alerts through third-party devices (*e.g.*, vibrating bed shakers and strobe lights) and will share its findings with industry to further enhance accessibility. Wireless RERC Comments on Tentative Findings at 8.

¹⁹⁴ See, *e.g.*, ¶ 18, *supra* (Consumer Groups reporting concerns about problems with CTS relay delivered over wireless systems); ¶ 30, *supra* (Consumer Groups expressing concerns about the need to maintain connections for neckloops or other assistive devices).

¹⁹⁵ See ¶ 30, *supra* (Consumer Groups expressing concern that re-engineering happens too often without consideration of the needs of people who are deaf or hard of hearing; AADB expressing concern that people who are deaf-blind have insufficient opportunity to provide input into research and development of new communications technologies).

¹⁹⁶ ACB Comments on Tentative Findings at 1 (noting, as examples, accessibility advances that have been made in Android devices and Windows Phones); AFB Comments on Tentative Findings at 1 (concurring that industry has made progress with respect to the accessibility of equipment and services that are subject to Sections 255, 716, and 718).

¹⁹⁷ See ¶ 21, *supra* (ACB reporting about accessibility problems with online business meeting applications and the default screen reader in Android-based devices; AFB reporting on accessibility deficiencies in Android-based devices and a lack of consistency by manufacturers and carriers in the implementation of accessibility features in products and services using this system).

¹⁹⁸ See ¶ 25, *supra* (CTIA explaining that the move to a platform-based approach by manufacturers ensures that accessibility features are more consistently available). See also ¶ 27, *supra* (TIA noting that the software platform approach for inclusion of accessibility features leverages the principle of universal design and greatly simplifies upgrades).

are concerns that these updates can end up impairing accessibility for users with disabilities, a result that often cannot be undone after the update has been downloaded.¹⁹⁹ Of particular note is the apparent lack of accessibility to or compatibility with assistive technology used by individuals who are deaf-blind,²⁰⁰ and complaints that many of the wireless phones that are being made available to low-income consumers who are blind or visually impaired by providers that participate in the Commission's Lifeline program either lack certain accessibility features, or are not accessible at all.²⁰¹ We also note that, while some providers appear to offer service plans that generally meet the needs of consumers with disabilities,²⁰² consumers have concerns about provider practices that could, in the future, negatively impact data speeds or cap data usage, either of which may make video communication difficult or impossible for consumers who are deaf or hard of hearing.²⁰³ These concerns suggest a need to be mindful about avoiding the creation of new barriers to accessibility as technologies and service plans continue to evolve.

44. *Industry consultation with individuals with disabilities.* The CVAA requires covered entities to keep records of their efforts to consult with individuals with disabilities.²⁰⁴ In response to the *2014 CVAA Tentative Findings PN*, the Wireless RERC asserts that, "wireless technology continues to evolve in both predictable and unforeseen ways" and "people with disabilities should always be consulted throughout the design and development phases of new or changing technologies and services."²⁰⁵ It is apparent that industry has taken some steps to include people with disabilities in their design and development of products and services. For example, CTIA, TIA, and Microsoft each report that they or their member companies have undertaken efforts to consult with individuals with disabilities through meetings and dialogues with consumer stakeholders,²⁰⁶ internal programs,²⁰⁷ advisory panels,²⁰⁸ and usability testing.²⁰⁹ However, we note that consumers remain concerned about the extent to which

¹⁹⁹ See ¶ 22, *supra*. (AADB observing that upgrades or updates sometimes cause a device or app to become less accessible or totally inaccessible for the user who is deaf-blind), ¶ 23, *supra* (Wireless RERC expressing the need to ensure that software updates do not disable accessibility). See also ¶ 47, *infra* (discussing this further as an accessibility barrier to new communications technologies).

²⁰⁰ See ¶ 22, *supra* (comments of AADB). See also ¶ 47, *infra* (discussing this further as an accessibility barrier to new communications technologies).

²⁰¹ See ¶ 24, *supra*. See also ¶ 58, *infra* (CGB reporting on consumer complaints about inaccessible wireless handsets received in conjunction with Lifeline services). In response to the *2014 CVAA Tentative Findings PN*, the Wireless RERC asserts that compliance with the CVAA by service providers under the Lifeline program is needed to support universal service for people who are economically disadvantaged, including many older adults and people with disabilities. Wireless RERC Comments on Tentative Findings at 11.

²⁰² See ¶ 38, *supra* (comments of CTIA).

²⁰³ See ¶ 37, *supra* (comments of Consumer Groups).

²⁰⁴ See 47 U.S.C. § 618(a)(5)(a)(i).

²⁰⁵ Wireless RERC Comments on Tentative Findings at 9, 12.

²⁰⁶ See ¶ 31, *supra* (CTIA reporting that its member companies have met with various disability-related organizations and consumer representatives), ¶ 32, *supra* (TIA reporting that its members continue to liaise with the disability community to ensure inclusive design, and that consultation with individuals with disabilities on research and development is taking place at both the company and industry association levels), ¶ 33, *supra* (Microsoft reporting that it holds an annual summit with Microsoft employees and disability rights advocates).

²⁰⁷ See ¶ 31, n.141, *supra* (CTIA noting, specifically, the establishment of a Corporate Accessible Technology Office by AT&T, and Verizon's online training courses for new employees about accessibility requirements).

²⁰⁸ See ¶ 31, *supra* (CTIA reporting wireless provider initiatives, including advisory panels).

²⁰⁹ See ¶ 33, *supra* (Microsoft reporting that it hires individuals with disabilities as usability testers).

engineering of products and services takes place without consideration of their accessibility needs. Consumer Groups, for example, raise concerns that “re-engineering happens too often without thought to [the] accessibility needs of people who are deaf or hard of hearing.”²¹⁰ Similarly, AADB states that its constituency has insufficient opportunity to provide input into the research and development of new communications technologies to meet its needs.²¹¹ In light of these competing views, we find that, while some efforts to consult with such individuals for this purpose have occurred over the past two years, more can be done to include people with disabilities early on in design and development of advanced communications products and services.

45. *Usability of products and services.* With respect to the usability of products and services,²¹² we find that industry has engaged in some efforts to ensure the availability of information about accessible products and services to people with disabilities, including training personnel about accessible products and services.²¹³ Nevertheless, we also find that gaps remain in the usability of these offerings and in the marketing and sharing of information about accessible products. For example, Consumer Groups and the Wireless RERC report that finding information about hearing aid compatible phones is still a challenge for consumers,²¹⁴ and AADB expresses a need for information about accessible products for consumers who are deaf-blind, as well as easy-to-use instructions for communication apps.²¹⁵ Similarly, ACB suggests that better marketing of accessible feature phones is needed and AFB suggests that companies need to provide accurate information through marketing, sales, and customer service about accessible products, features, and functions that are available.²¹⁶ In addition, we note that complaints brought to the Commission over the covered time period revealed a considerable number of problems with inaccessible instructions or billing, inaccessible contact information or directory assistance, and inaccessible customer service.²¹⁷

C. Accessibility Barriers in New Communications Technologies

46. Section 717(b)(1)(B) of the Act requires the Commission to provide an evaluation of the extent to which any accessibility barriers still exist with respect to new communications technologies.²¹⁸ The *2012 CVAA Biennial Report* predicted that “many accessibility barriers in new communications technologies will likely be addressed by industry compliance with the new accessibility requirements

²¹⁰ See ¶ 30, *supra*, citing Consumer Groups Comments at 3 (raising concerns about the possible negative effects of elimination of the headphone jack on future models of smartphones).

²¹¹ See ¶ 30, *supra*.

²¹² As noted above, a product or service is “usable” if individuals with disabilities have access to the full functionality and documentation for the product or service, including instructions, product or service information (including accessible feature information), documentation and technical support functionally equivalent to that provided to individuals without disabilities. See ¶ 33, n.151, *supra*.

²¹³ See, e.g., ¶ 35, *supra* (CTIA reporting that its members provide information about accessible products and services through a variety of means); ¶ 36, *supra* (Microsoft noting that its customer assistance is available from staff specially trained on accessibility issues).

²¹⁴ See ¶ 34, *supra*.

²¹⁵ *Id.*

²¹⁶ *Id.*

²¹⁷ See ¶ 59, *infra*.

²¹⁸ 47 U.S.C. § 618(b)(1)(B).

under Section 716 and Section 718 when those requirements are fully effective.”²¹⁹ In the *2014 CVAA Assessment PN*, CGB sought comment on the extent to which this expectation has been met.²²⁰ CGB also sought comment on the extent to which new communication technologies, including new communication services, hardware, software, applications, or plug-ins, both within the scope of the Act (*e.g.*, covered under Sections 255, 716, and 718) and outside the scope of the Act, have been deployed since the *2012 CVAA Biennial Report*, and what barriers still exist with respect to these technologies.²²¹

1. Comments Received

47. Comments received from consumers who are deaf or hard of hearing show that they continue to lack confidence that new communications technologies are being designed to be accessible. For example, Consumer Groups fear that the rise of voice-controlled technologies, particularly those that incorporate advanced communications services features, may exclude individuals who do not speak or who do not speak clearly, and urge the Commission to monitor these new technologies.²²² Consumer Groups also express concern that accessibility barriers to new communication technologies continue to exist for individuals who are deaf-blind and for deaf individuals who also have mobility disabilities.²²³ In particular, they report that IP Relay service,²²⁴ especially when used while mobile, is not accessible to deaf-blind consumers who use Braille displays.²²⁵ Similarly, ACB’s comments allege the failure of software system manufacturers, application designers, and smart television manufacturers to make their communications technologies fully accessible to the blind community.²²⁶ For example, ACB mentions that upgrades to Skype often make its user interface more difficult to use for users who are blind or visually impaired.²²⁷ In particular, ACB urges that a committee be established to validate the accessibility of software applications, so that consumers could know with certainty which apps are accessible.²²⁸ At the same time, however, ACB applauds Comcast for its new set-top box that, despite some problems,

²¹⁹ *2012 CVAA Biennial Report*, 27 FCC Rcd at 12222, ¶ 46.

²²⁰ *2014 CVAA Assessment PN*, 29 FCC Rcd at 7322, ¶ 12.

²²¹ *Id.*

²²² Consumer Groups Comments at 8-9.

²²³ *Id.* at 8. To address these issues, Consumer Groups urge the development of a new type of relay service that would enable such individuals to benefit from interpreters who are physically present, or to be matched with VRS communication assistants who can understand and communicate with them. *Id.*

²²⁴ IP Relay service is defined in the Commission’s rules as a form of TRS “that permits an individual with a hearing or a speech disability to communicate in text using an Internet Protocol-enabled device via the Internet, rather than using a text telephone (TTY) and the public switched telephone network.” 47 C.F.R. § 64.601(17).

²²⁵ AADB Comments at 3, 5; ACB Comments at 2. AADB states that manufacturers, software developers, and others often proclaim that products, such as digital talking books or audio only temperature apps, are “fully accessible” when they are not accessible to individuals who are deaf-blind. AADB Comments at 2. These kinds of products, however, do not fall within the scope of this *Report* to the extent they do not provide advanced communication services. In addition, AADB expresses dissatisfaction with their members’ ability to access captions or video descriptions on video or television programs through their assistive devices, matters that are also outside the scope of this *Report*. *Id.* at 5.

²²⁶ ACB Comments at 2-3. We note, however, that the Commission has granted a class waiver of the advanced communications services accessibility rules until October 8, 2015, for Internet protocol-enabled television sets. *ACS Waiver Order*, 27 FCC Rcd at 12973-78, ¶¶ 6-14.

²²⁷ ACB Comments at 2.

²²⁸ *Id.*

represents to ACB the sole industry attempt to make this type of navigation device accessible to blind users.²²⁹

48. Rather than focus on the extent to which new communications technologies have been deployed since the *2012 CVAA Biennial Report* or the barriers that still exist with respect to these technologies in response to the *2014 CVAA Assessment PN*, industry commenters propose Commission actions that could be taken to increase accessibility. For example, to better serve all consumers, CTIA urges the Commission to adopt policies “that make more spectrum available for commercial use, promote infrastructure deployment, and rely on the lightest touch regulatory scheme possible.”²³⁰ Similarly, TIA suggests that the Commission can effectively increase the availability of advanced communications services and products to people with disabilities by affording manufacturers maximum flexibility in meeting the requirements of the CVAA.²³¹ CEA notes that modern electronic devices and apps have removed many accessibility barriers (which CEA recognizes in its annual Innovation Awards), and further suggests that policy makers and advocates should encourage more advanced devices and apps to increase accessibility.²³²

2. Findings on Accessibility Barriers in New Communications Technologies²³³

49. Based on comments filed in response to the *2014 CVAA Assessment PN*, we tentatively found that while strides have been made toward ensuring the accessibility of new communications technologies in industry design and development processes, accessibility barriers still exist with respect to certain new communications technologies.²³⁴ We now affirm this finding based on the comments

²²⁹ *Id.* at 2. Although we note ACB’s praise for the accessibility of Comcast’s new set-top box here, it is not clear whether any of the navigation device features to which ACB alludes enables access to the communications technologies covered by this *Report*. We also note that the Commission granted a class waiver of the advanced communications accessibility rules until October 8, 2015, for set-top boxes that are leased by cable operators to their customers. *ACS Waiver Order*, 27 FCC Rcd at 12978-82, ¶¶ 15-22. See also Section III.J of this *Report*, *infra* (summarizing accessibility requirements for video programming guides and menus provided by navigation devices).

²³⁰ CTIA Comments at 36. Further, with a goal toward reducing regulation, CTIA suggests that the Commission evaluate the continued need for wireless phones to be compatible with TTYs, which CTIA says may be outdated. *Id.* at 39-40.

²³¹ TIA Comments at 9. TIA asserts that strict application of the advanced communications services accessibility requirements would harm the public interest without meaningfully increasing access to advanced communications services for people with disabilities. *Id.* at 10. Microsoft also cites with approval the Commission’s flexible regulations. Microsoft Comments at 3. While Microsoft uses as an example the Commission’s efforts to focus on ease of use rather than specific solutions for its closed captioning requirements, we note that the Commission’s rules governing closed captioning fall outside the scope of the communications accessibility discussion in this *Report*. *Id.* at 3-4.

²³² CEA Comments at 5-6. With respect to accessibility barriers that exist in new technologies, CEA recommends that the Commission’s evaluation be limited to services and equipment that are subject to Sections 255, 716, and 718 of the Act. *Id.* at 6. As noted in its *2012 CVAA Biennial Report*, the Commission believes that Congress will be better informed about the state of communications that are or are not accessible to individuals with disabilities, the impact of the CVAA, and the need for additional legislative action, if any, if the Commission’s report includes an account of accessibility barriers with respect to “new communications technologies” without regard to whether they fall within or outside the scope of the Act and including both those that can and cannot be eliminated with reasonable effort or expense. *2012 CVAA Biennial Report*, 27 FCC Rcd at 12222, ¶ 45.

²³³ As noted above, the Commission sought comment on these findings pursuant to Section 717(b)(2) of the Act. See ¶ 6, *supra*.

²³⁴ See *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ____, Attachment ¶ 30.

received in response to the *2014 CVAA Assessment PN*.²³⁵ We base our conclusion that accessibility gains have been made, in part, on reports of industry efforts to incorporate the input of individuals with disabilities through product testing, to consider accessibility needs during the research and development stages of new products and services,²³⁶ and to modify internal processes as needed to comply with the accessibility requirements.²³⁷ Further support is found in the reported breadth of accessibility features offered in today's communications technologies by manufacturers and service providers.²³⁸

50. Our finding that accessibility barriers still exist is supported by AADB's and Consumer Groups' reports that a majority of communications technologies are not accessible to individuals who are deaf-blind.²³⁹ Consumer Groups also report that accessibility barriers exist for deaf individuals who also have mobility disabilities.²⁴⁰ In addition, Consumer Groups observe that mainstream video conferencing services remain incompatible with TRS, and that off-the-shelf video conferencing systems, upon which many individuals who use American Sign Language rely for their primary means of communication, are not interoperable among themselves or with videophones available through VRS providers.²⁴¹ Statements submitted by the Consumer Groups that accessibility barriers may be created by the advent of new technologies also lead us to affirm our prior tentative finding that there is a need for industry design and development teams to be mindful of the effects that new product and service design features can have on accessibility.²⁴² For example, Consumer Groups report potential new barriers that may result if voice controls replace (rather than supplement) interfaces presently accessible to people who are deaf, hard of hearing, or have speech disabilities,²⁴³ and if software upgrades reverse accessibility currently available on certain devices or apps.²⁴⁴

²³⁵ Comments in response to the *2014 CVAA Tentative Findings PN* did not specifically address our tentative findings with respect to accessibility barriers in new communications technologies.

²³⁶ See ¶¶ 31-33, *supra* (CTIA, TIA, and Microsoft reporting on efforts to consult with individuals with disabilities – from research and development through product testing).

²³⁷ See ¶ 28, *supra* (CEA discussing its members' efforts to comply with advanced communications services accessibility requirements).

²³⁸ See ¶¶ 25-26, *supra* (comments of CTIA).

²³⁹ See ¶¶ 22, 47, *supra* (Consumer Groups advocating for a new type of relay service for such individuals).

²⁴⁰ See ¶ 47, *supra*.

²⁴¹ See ¶ 19, *supra* (Consumer Groups discussing accessibility barriers with respect to video conferencing services and equipment).

²⁴² See *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ___, Attachment ¶ 31. As noted above, CTIA asserts that concerns about the accessibility of interoperable video conferencing services are premature, given that the Commission has not resolved the issue of how to define the term "interoperable." See n.66, *supra*. See also CTIA Comments on Tentative Findings at 3. Nonetheless, we believe that our tentative finding that accessibility barriers still exist continues to be supported, in part, by these concerns expressed by Consumer Groups.

²⁴³ See ¶ 47, *supra* (comments of Consumer Groups).

²⁴⁴ See, e.g., ¶ 47, *supra* (ACB discussing upgrades to Skype that make its user interface more difficult to use); ¶ 22, *supra* (AADB noting that upgrades or updates sometimes cause a device or app to become less accessible or totally inaccessible for the user who is deaf-blind).

D. Complaints Received Pursuant to Section 717

51. Sections 717(b)(1)(C)-(F) of the Act require the Commission to report the following information with respect to complaints received pursuant to Section 717(a) of the Act that allege violations of Sections 255, 716, or 718 of the Act:

- the number and nature of complaints received during the two years that are the subject of the Commission's *Report*, *i.e.*, between January 1, 2012 and December 31, 2013;
- the actions taken to resolve such complaints, including forfeiture penalties assessed;
- the length of time that was taken by the Commission to resolve each such complaint; and
- the number, status, nature, and outcome of any actions for mandamus and any appeals filed.²⁴⁵

52. Before addressing each of these matters, this section of the *Report* provides a brief explanation of the complaint procedures used by CGB for the handling of accessibility complaints filed under Section 255 before the effective date of the CVAA complaint procedures, and how those procedures have been changed, effective October 8, 2013, for accessibility complaints filed under Sections 255, 716, and 718.

53. *Prior accessibility complaint procedures.* In 1997, the Commission adopted procedures to address informal complaints filed under Section 255 of the Act.²⁴⁶ These procedures remained in effect from January 1, 2012 until October 8, 2013, which constitutes part of the period covered by this *Report*. Under these procedures, individuals were permitted to file an informal accessibility complaint with CGB's Disability Rights Office (DRO) by letter, phone call, fax, online form, or other reasonable means.²⁴⁷ Upon receipt, CGB entered the complaint into a database called the Consumer Complaint Management System (CCMS) and then served a Notice of Informal Complaint (NOIC) on the service provider and/or equipment manufacturer against whom the complaint was brought.²⁴⁸ The provider or manufacturer was then given 30 days in which to respond to the NOIC.²⁴⁹ If DRO then concluded that all issues were satisfied and the consumer's satisfaction with the resolution was verified, or that no further action was required or possible, it considered the matter closed and sent the consumer a close-out letter.²⁵⁰ DRO was not authorized to impose forfeitures or take other enforcement action in response to an informal complaint alone. However, if the consumer was not satisfied with the provider's or manufacturer's response to the complaint and the DRO decision to terminate action, the consumer could file a formal complaint that could go to the Commission's Enforcement Bureau to determine whether a material and substantial question remained with respect to compliance.²⁵¹ The Enforcement Bureau could

²⁴⁵ 47 U.S.C. §§ 618(b)(1)(C)-(F).

²⁴⁶ See 47 C.F.R. §§ 6.16-6.20, 7.16-7.20. No formal complaints regarding accessibility were filed during the period covered by this *Report*. See 47 C.F.R. §§ 6.21-6.22, 7.21-7.22 (formal complaint procedures).

²⁴⁷ 47 C.F.R. §§ 6.17(a), 7.17(a).

²⁴⁸ See 47 C.F.R. §§ 6.18(a), 7.18(a).

²⁴⁹ 47 C.F.R. §§ 6.19, 7.19.

²⁵⁰ See 47 C.F.R. §§ 6.18(a)-(b), 7.18(a)-(b).

²⁵¹ See 47 C.F.R. §§ 6.20(b)-(c), 7.20(b)-(c).

then investigate further to determine compliance and whether any remedial actions and/or sanctions were warranted.²⁵²

54. *New accessibility complaint procedures.* Effective October 8, 2013, the Commission revised the complaint process for handling complaints filed under Sections 255, 716 and 718 of the CVAA, pursuant to new rules implementing Section 717(a) of the Act.²⁵³ The new rules require that before filing an informal complaint, a consumer must submit a “request for dispute assistance” (RDA) to DRO for help in resolving the consumer’s accessibility problem with a telecommunications or advanced communications service provider or equipment manufacturer.²⁵⁴ If the two parties do not reach a settlement within 30 days after the filing of an RDA, the parties may agree to extend the time for resolution in 30-day increments, or the requester may file an informal complaint with the Enforcement Bureau.²⁵⁵

55. Since October 8, 2013, the Commission’s new complaint rules have established minimum requirements for information that must be contained in an informal complaint.²⁵⁶ These rules further specify that upon receipt, the Commission must forward an informal complaint to the service provider or equipment manufacturer named in or implicated by the complaint.²⁵⁷ The service provider or manufacturer then must file with the Commission and serve an answer responsive to the complaint and any Commission inquiries, and serve the complainant and the Commission with a non-confidential summary of that answer within 20 days of service of the complaint.²⁵⁸ Within 180 days after receipt of the complaint, the Commission must conclude an investigation into the merits of the complaint and issue its order determining whether a violation has occurred.²⁵⁹ It may, in such order, or in a subsequent order, direct the service provider to bring the service or, in the case of a manufacturer, the next generation of the equipment, into compliance with the requirements of Section 255, 716, or 718 within a reasonable period of time and take other authorized and appropriate enforcement action.²⁶⁰

²⁵² See 47 C.F.R. §§ 6.20(c)-(d), 7.20(c)-(d).

²⁵³ See 47 C.F.R. §§ 14.32 (consumer dispute assistance), 14.34-14.37 (informal complaints), 14.38-14.52 (formal complaints). See also *New Procedures for Telecommunications and Advanced Communications Accessibility Complaints*, FCC 13-2177, Public Notice, 28 FCC Rcd 15712 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-2177A1.pdf.

²⁵⁴ Prior to October 8, 2013, consumers were able to file informal complaints with DRO alleging a violation of Section 255 of the Act without the prerequisite filing of an RDA.

²⁵⁵ 47 C.F.R. § 14.32(e). See also *ACS Report and Order*, 26 FCC Rcd at 14658, ¶ 237. Although, previously, consumers could file informal complaints alleging a violation of Section 255, 716, or 718 of the Act with DRO, these complaints must now be filed with the Commission’s Enforcement Bureau. 47 C.F.R. § 14.34(a). However, since October 8, 2013, consumers are still able to file formal complaints with the Enforcement Bureau without first submitting requests for dispute assistance. 47 C.F.R. §§ 14.38-14.52

²⁵⁶ 47 C.F.R. § 14.34(b).

²⁵⁷ 47 C.F.R. § 14.35(a).

²⁵⁸ 47 C.F.R. §§ 14.36(b)-(c). The complainant may then file a reply. 47 C.F.R. § 14.36(d).

²⁵⁹ 47 U.S.C. § 618(a)(3)(B) and (4). See also 47 C.F.R. § 14.37(a).

²⁶⁰ 47 U.S.C. § 618(a)(3)(B)(i). See also 47 C.F.R. § 14.37(b). Any manufacturer or service provider that is the subject of such order has a reasonable opportunity to comment on the Commission’s proposed remedial action before the Commission issues a final order with respect to that action. 47 U.S.C. § 618(a)(4). See also 47 C.F.R. § 14.37(c).

56. When the Commission established the RDA process, it anticipated that this process would allow for the resolution of consumer accessibility concerns through dialogue and negotiation, thereby reducing the need for informal complaints, and consequent enforcement action.²⁶¹ We believe that the new RDA process has succeeded in this respect, and that the new complaint process has further encouraged service providers and equipment manufacturers to comply with the accessibility rules.

1. Number and Nature of Complaints Received

57. From January 1, 2012, to October 7, 2013, consumers filed 85 informal complaints with the Commission, alleging violations of Section 255 of the Act or its implementing regulations.²⁶² Of these complaints, approximately 34% alleged violations by equipment manufacturers and 54% alleged violations by service providers, with the remaining 12% alleging both service and equipment violations. In addition, between October 8, 2013 and December 31, 2013, consumers filed seven RDAs with DRO under the new complaint procedures, all of which concerned Section 255 of the Act or its implementing regulations.²⁶³ During that three-month period, no RDAs were filed alleging violations of Sections 716 or 718 of the Act, and no informal complaints were filed alleging violations of Sections 255, 716, or 718. Of the seven RDAs that were filed, approximately 86% alleged violations by service providers and 14% alleged violations by both equipment manufacturers and service providers. For the entire two-year period covered by this *Report*, a total of 92 informal complaints and RDAs were filed, all of which alleged accessibility violations under Section 255. An aggregate of approximately 31.5% alleged violations by equipment manufacturers and 56.5% alleged violations by service providers, with the remaining 12% alleging both service and equipment violations.

58. Equipment-related complaints and RDAs raised a wide range of accessibility issues by consumers with disabilities. Many consumers complained of handsets that lacked text-to-speech functionality, or that had keyboards that were hard to read or buttons that were too small to use. Others complained of handsets that were not compatible with their hearing aids or that had poor sound quality. Approximately 15% of all informal complaints and RDAs received during the reporting period involved complaints about inaccessible wireless handsets received in conjunction with subscriptions for telephone services under the Commission's Lifeline program.

59. Complaints and RDAs involving service providers predominantly focused on their failure to provide instructions or billing in an accessible format, accessible contact information or directory assistance, and accessible customer service. More specifically, approximately 12% of all informal complaints and RDAs alleged an inability to access billing information. Most of these were from consumers who were blind or visually impaired, who expressed long-standing frustrations with acquiring access to their accounts. Some of the consumers were facing imminent service cut-offs at the time they filed their complaint or RDA, due to an inability to access their billing information. An additional 11% of informal complaints and RDAs came from consumers who, because they are blind or visually impaired,

²⁶¹ See 2012 CVAA Biennial Report, 27 FCC Rcd at 12224, ¶ 49, n.148.

²⁶² From January 1, 2012, until October 8, 2013, consumers filing Section 255 accessibility complaints utilized the Commission's prior informal complaint procedures. See ¶ 53, *supra*.

²⁶³ From October 8, 2013, through December 31, 2013, consumers filing Section 255 accessibility complaints utilized the Commission's new accessibility complaint procedures. See ¶¶ 54-55, *supra*. Also during this period, and perhaps due to consumer unfamiliarity with the new accessibility complaint procedures, DRO received an additional 21 RDAs, but because these did not involve violations of Section 255, 716 or 718, DRO converted these to complaints filed under other provisions of the Act. These 21 RDAs are therefore not included in the above statistics.

sought free access to a phone company's 411 directory assistance services because they could not access free text-based telephone directory information. Another 6% of the informal complaints and RDAs were from consumers who are deaf or hard of hearing, who alleged that certain communication service providers refused to accept calls made through TRS, a TTY, or to otherwise communicate by text.²⁶⁴

2. Actions Taken to Resolve Accessibility Complaints

60. *Complaints filed under prior accessibility complaint procedures.* For each informal complaint filed with the Commission between January 1, 2012, and October 8, 2013, DRO forwarded the complaint to, and served an NOIC on, the service provider and/or equipment manufacturer alleged to have violated Commission rules. In most cases, equipment manufacturers and service providers attempted to work with consumers to resolve their particular needs. Accessibility complaints were often addressed by providing the requested equipment, identifying equipment that was available as an upgrade, or informing consumers of new models with accessibility features that would be issued in the future. For example, DRO was generally successful in securing accessible equipment for complainants seeking accessible phones from providers in the Lifeline program because these providers typically could identify higher cost handsets with accessible features, which they provided to complainants at no additional cost. Service providers also accommodated consumers who needed accessible formats for billing, equipment instructions, and directory assistance. DRO intervention also prevented service disruption for several complainants who had been unable to pay their bills due to inaccessible formats.

61. In a majority of cases, as a result of DRO's actions, complaints about accessibility and usability problems were resolved promptly and to the satisfaction of the consumer. For all but three of the 85 informal complaints filed during the reporting period (*i.e.*, in 96% of these cases), DRO verified the consumer's satisfaction with the resolution or determined that no further action was required or possible, and sent the consumer a close-out letter during the reporting period. One of the remaining complaints was resolved after the reporting period closed. DRO is making best efforts to facilitate resolution of the two complaints that are still pending.

62. *New accessibility complaint procedures.* For six of the seven RDAs filed under the new complaint procedures, DRO contacted the consumer and the manufacturer or service provider in an attempt to resolve the accessibility or usability problem. DRO dismissed one RDA because it was unable to obtain a response from the consumer to obtain additional information about the accessibility problem or to facilitate resolution. DRO was able to facilitate a resolution for each of the remaining six RDAs, and none were escalated to an informal complaint for investigation by the Enforcement Bureau.²⁶⁵ Based on this experience, it appears that there is general consumer satisfaction with the new dispute assistance and complaint process.

63. The Commission did not assess any forfeiture penalties for accessibility-related violations during the period covered by this *Report*.

²⁶⁴ For example, a deaf consumer alleged that her major mobile telephone service provider refused to communicate with her about her account through TRS, suggesting instead that it communicate with the consumer's 14-year-old daughter or by having the complainant physically appear at one of the provider's stores. The consumer's complaint was resolved when DRO informed the provider of its obligation to ensure usable customer service and technical support in call centers that support their products. *See* 47 C.F.R. § 6.11(a)(3).

²⁶⁵ For example, one service provider worked with a consumer who had difficulty in finding an accessible mobile handset with sufficiently strong signal reception in his home. The service provider allowed the consumer to test several models until the consumer was able to find an accessible handset that he could use.

3. Time Used to Resolve Accessibility Complaints

64. *Complaints filed under prior accessibility complaint procedures.* Under the prior complaint procedures, there was no prescribed time frame for resolving informal complaints alleging violations of Section 255. Of the 82 informal complaints that were received and closed by DRO during the reporting period, 51 complaints, or approximately 62%, were closed within 90 days. Another 26 complaints, or approximately 32%, were closed between 90 and 180 days. Five complaints, or about 6%, were closed between 180 days and one year. In other words, all 82 informal complaints that were received and closed by DRO during the reporting period were resolved within one year.

65. *New accessibility complaint procedures.* Under the new complaint procedures, a consumer must submit an RDA and allow DRO 30 days to facilitate resolution of the accessibility problem, before the consumer may file an informal complaint with the Enforcement Bureau. The time period for resolution may be extended in 30-day increments. Of the seven RDAs that were filed during the reporting period, one was dismissed at the end of 60 days because DRO was unable to obtain a response from the consumer. DRO facilitated resolution of four of the remaining RDAs within 30 days of receipt and one within 60 days of receipt. DRO resolved the final RDA after the reporting period ended, but within 180 days of receipt. None of the RDAs filed were escalated to an informal complaint for investigation by the Enforcement Bureau.

4. Actions for Mandamus and Appeals Filed

66. There were no actions for mandamus or appeals filed with respect to complaints during the period covered by this *Report*.

E. Effect of Section 717's Recordkeeping and Enforcement Requirements on the Development and Deployment of New Communications Technologies

67. Section 717(b)(1)(G) of the Act requires the Commission to provide an assessment of the effect of the requirements of Section 717 of the Act on the development and deployment of new communications technologies.²⁶⁶ Section 717(a) requires the Commission to establish new recordkeeping and enforcement procedures for service providers and equipment manufacturers that are subject to Sections 255, 716, and 718.²⁶⁷ In the *2014 CVAA Assessment PN*, CGB sought comment on the impact, if any, that the CVAA's recordkeeping requirements and enforcement measures, including the requirement for consumers to request dispute assistance from the Commission as a prerequisite to filing an informal complaint, have had on the development and deployment of accessible new communications technologies since these requirements became effective.²⁶⁸ CGB also asked whether service providers and equipment

²⁶⁶ 47 U.S.C. § 618(b)(1)(G).

²⁶⁷ 47 U.S.C. § 618(a). The Commission's rules require service providers and equipment manufacturers to maintain records to demonstrate compliance with Sections 255, 716, and 718 when a complaint is filed. 47 C.F.R. § 14.36(a). Entities must certify annually to the Commission that they have kept records pertaining to the accessibility of their products beginning January 30, 2013. *See* 47 U.S.C. § 618(a)(5)(B); 47 C.F.R. § 14.31. In response to an informal complaint, the manufacturer or service provider "must produce documents demonstrating its due diligence in exploring accessibility and achievability . . . throughout the design, development, testing, and deployment stages of a product or service." 47 C.F.R. § 14.36(a). Since October 8, 2013, the Commission also has been required to investigate complaints filed under these sections and to issue orders on such investigations within 180 days after an informal complaint is filed, unless the complaint is resolved before that time. 47 C.F.R. § 14.37(a).

²⁶⁸ *2014 CVAA Assessment PN*, 29 FCC Rcd at 7323, ¶ 14.

manufacturers have identified best practices with respect to the recordkeeping requirements that can be shared with others.²⁶⁹

1. Comments Received

68. No consumer organizations commented on the recordkeeping or enforcement requirements of Section 717. Industry, however, generally reports that it finds value in certain aspects of Section 717's recordkeeping and enforcement requirements, and otherwise urges clarification of or flexibility in interpretation of other aspects of those requirements. CTIA states that "the CVAA and good faith efforts of the wireless industry and accessibility community has resulted in collaborations that encourage the exchange of information about priorities, challenges, and issues."²⁷⁰ In particular, CTIA believes that the requirement to provide contact information for a company representative who can address accessibility complaints "has been a resounding success," enabling resolution of accessibility concerns before requesting assistance from or filing complaints with the Commission.²⁷¹ CTIA urges that this direct engagement continue as the primary method of resolving issues.²⁷²

69. CTIA also urges the Commission to recognize the need for flexibility in recordkeeping and consultation requirements.²⁷³ Nonetheless, CTIA opines that Commission actions, such as clarifying recordkeeping and consultation requirements, could improve the ability of covered entities to comply fully with the CVAA requirements.²⁷⁴ For example, CTIA suggests that, in the absence of a Commission determination about "the types of records, processes, and efforts to engage the accessibility community" that comply with the Commission's rules, the Commission should "remain flexible with respect to imposing any penalties if an entity's records are ultimately unexpectedly found to be insufficient or non-compliant."²⁷⁵ Similarly, TIA states that its members have been complying with the recordkeeping requirements and certifications required under the CVAA, and stresses that "it is important that the Commission continue to recognize the need for flexibility and efficiency in the approaches taken to meet the recordkeeping obligations outlined within the CVAA."²⁷⁶ Likewise, CEA applauds the flexibility provided with respect to recordkeeping mechanisms, but notes that the process still requires significant resources, and urges the Commission to continue to avoid regulations or enforcement practices that lock in any given solution that may become obsolete.²⁷⁷

²⁶⁹ *Id.*

²⁷⁰ CTIA Comments at 34.

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ *Id.* at 35-36. CTIA also recommends streamlining hearing aid compatibility reporting requirements. *Id.* at 35. Hearing aid compatibility reporting requirements are outside the scope of Section 717 of the Act.

²⁷⁴ *Id.* at 34-36.

²⁷⁵ *Id.* at 36, citing PN Comments of CTIA-The Wireless Association – Accessibility of Communications Technologies, Docket No. 10-213 (filed Jul. 25, 2012) at 19-20 (recognizing that the "development of an effective recordkeeping process may require some experience with the rules and their enforcement," CTIA urged the Commission not to "penalize entities that are attempting in good faith to comply with the rules").

²⁷⁶ TIA Comments at 10.

²⁷⁷ CEA Comments at 6.

2. Findings on the Effect of Section 717's Recordkeeping and Enforcement Requirements on the Development and Deployment of New Communications Technologies²⁷⁸

70. In the *2014 CVAA Tentative Findings PN*, we tentatively found that the recordkeeping obligations mandated by Section 717, along with the flexibility provided to entities charged with complying with these requirements, have helped to foster collaboration between industry and consumers, and have helped to eliminate accessibility barriers encountered by consumers with disabilities.²⁷⁹ We based this conclusion on the increasing array of accessible products and services now available to consumers to access advanced communications technologies.²⁸⁰ At the same time, we tentatively found that nothing in the record indicates that Section 717's requirements will hinder the development and deployment of new communications technologies.²⁸¹ We based this conclusion on the significant growth in the number and types of new communications technologies that have emerged over the past two years.²⁸² Comments in response to the *2014 CVAA Tentative Findings PN* did not address these tentative findings. As such, we affirm those findings on the effect of Section 717's recordkeeping and enforcement requirements based on the comments received in response to the *2014 CVAA Assessment PN*.

F. Future Biennial Reports

71. In the *2014 CVAA Tentative Findings PN*, we asked about other kinds of information that would help the Commission to conduct the assessments required by the CVAA for the next biennial report to be submitted by October 8, 2016.²⁸³ With respect to future biennial reports, Inclusive Technologies believes that the Commission should “move from anecdotal collection to a more rigorous and data-driven framework” to assess the state of information and communication technology (ICT) accessibility and to provide useful policy guidance.²⁸⁴ Inclusive Technologies acknowledges the efforts

²⁷⁸ As noted above, the Commission sought comment on these findings pursuant to Section 717(b)(2) of the Act. See ¶ 6, *supra*.

²⁷⁹ See *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ____, Attachment ¶ 51.

²⁸⁰ See, e.g., ¶ 25, n.108, *supra* (CTIA discussing accessible feature phones and new entities that market services and offer accessible phones to seniors and individuals who are blind or visually impaired); ¶ 25, nn.110-113, *supra* (CTIA reporting on features that make the advanced communications services functions on smartphones more accessible to individuals with disabilities); ¶ 28, *supra* (CEA reporting that its members are actively engaged in efforts to comply with the Commission's advanced communications services accessibility rules); ¶ 29, *supra* (Microsoft noting that it provides consumers with disabilities a choice of built-in or third-party accessibility solutions). See also ¶ 68, *supra* (CTIA discussing wireless industry and accessibility community collaborations).

²⁸¹ See *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ____, Attachment ¶ 51

²⁸² See, e.g., “Ten Breakthrough Technologies 2013: Smart Watches,” available at <http://www.technologyreview.com/featuredstory/513376/smart-watches/> (last viewed Oct. 3, 2014) (Pebble smart watches “connect wirelessly to an iPhone or Android phone and displays notifications, messages, and other simple data of the user's choosing”); “Google Glass,” available at <http://www.google.com/glass/start/what-it-does/> (last viewed Oct. 3, 2014) (Send a Message: “Whether you ski, snowboard, snowshoe or anything in between, it's never easy to keep track of your friends. With Glass, you can keep your mittens on and send messages hands free through SMS or Hangouts.”).

²⁸³ *2014 CVAA Tentative Findings PN*, 29 FCC Rcd at ____, ¶ 13.

²⁸⁴ Comments of Inclusive Technologies (IT Comments on Tentative Findings) at 1. Inclusive Technologies is a small business consultancy on accessible information and communications technologies. IT Comments on Tentative Findings at 1.

of the wireless industry to provide information to the public about the accessibility features of their products, and recommends that the Commission encourage other segments of industry (that know their products best) to populate similar databases, which could also be used expand the scope of the Commission's Accessibility Clearinghouse.²⁸⁵ At the same time, Inclusive Technologies recommends that the Commission undertake a research initiative to learn more about the market that accessible ICT is intended to serve, particularly "about the people who are *not* using technology productively."²⁸⁶ Similarly, AFB recommends that, in partnership with consumer organizations and industry, the Commission should design and conduct a "thorough market monitoring review" of accessibility and usability for inclusion in the next biennial report.²⁸⁷

72. We will continue to work with consumer, industry, and other stakeholders to identify and obtain the data necessary to effectively inform Congress about accessible telecommunications and advanced communications services and equipment, accessibility barriers in new communications technologies, and the effect of the accessibility recordkeeping and enforcement requirements on the development and deployment of new communications technologies. Toward that end, we will consider undertaking new types of reviews of accessibility and conducting market research in preparation for the next biennial report.

III. COMMISSION ACTIONS TO IMPLEMENT THE CVAA

73. Since the submission of the *2012 CVAA Biennial Report*, the Commission has continued to work with consumer, industry, and government stakeholders to ensure effective and timely implementation of the CVAA. For example, as described further below, the Commission has taken the following actions:²⁸⁸

- Issued multiple public notices and 10 notices of proposed rulemaking seeking comment on CVAA-related issues; and
- Released eight reports and orders adopting rules or taking other actions to implement various provisions of the CVAA.²⁸⁹

74. Resources throughout the Commission have contributed to this effort, reflecting the Commission's ongoing commitment to ensuring access to communications and video programming for millions of Americans with disabilities. To date, the Commission has met every one of the CVAA's rigorous rulemaking deadlines, where feasible.²⁹⁰

²⁸⁵ *Id.* at 1-2. See also ¶ 35, n.161, *supra*; Section III.C of this *Report, supra* (providing information about the Accessibility Clearinghouse). Inclusive Technologies also encourages the Commission "to do much more to disseminate the availability of this information resource to consumers with disabilities." IT Comments on Tentative Findings at 2.

²⁸⁶ *Id.* (emphasis in original).

²⁸⁷ AFB Comments on Tentative Findings at 3.

²⁸⁸ As noted above, this *Report* generally covers the time period between January 1, 2012, and December 31, 2013. See ¶ 16, *supra*. For this section of this *Report*, however, we describe actions taken after October 5, 2012, the date the *2012 CVAA Biennial Report* was released, and before the release of this *Report*.

²⁸⁹ See Appendix B for a list of CVAA-related items released by the Commission since October 2012.

²⁹⁰ The CVAA required the Commission to prescribe regulations to implement Sections 204 and 205 of the CVAA by October 9, 2013, a deadline that occurred during a shutdown of the federal government due to a lapse in

A. Section 102. Hearing Aid Compatibility

75. Section 710 of the Act and the Commission's rules require all wireline phones to be hearing aid compatible (HAC) and specify benchmarks by which certain percentages of wireless handsets must be compliant with American National Standards Institute (ANSI) technical standards for compatibility with hearing aids operating in both acoustic coupling and inductive coupling modes.²⁹¹ These benchmarks apply separately to each air interface for which the manufacturer or service provider offers handsets.²⁹² Section 102(a)(1) of the CVAA amends Section 710 to extend these HAC requirements to customer premises equipment (CPE) "used with advanced communications services that is designed to provide 2-way voice communication via a built-in speaker intended to be held to the ear in a manner functionally equivalent to a telephone, subject to the regulations prescribed by the Commission under [Section 710(e)]."²⁹³ Section 102(b) of the CVAA provides that CPE that is compliant with technical standards developed through a public participation process and in consultation with interested consumer stakeholders designated by the Commission will be considered hearing aid compatible for purposes of section 710, until such time as the Commission may designate otherwise.²⁹⁴ Finally, Section 102(a)(2) creates a requirement for the Commission to periodically assess the exemptions for telephones and CPE that the Commission has applied pursuant to the Act.²⁹⁵

76. *Volume Control Standard for Wireline Telephones.* Since the 2012 CVAA Biennial Report, on October 25, 2012, TIA filed a petition for rulemaking requesting that the Commission modify its rules relating to standards for HAC volume control (Petition).²⁹⁶ In its Petition, TIA requests that the Commission update relevant Part 68 references to incorporate the most recent TIA standard – ANSI/TIA-4965 – over a two-year phase-in period, to allow persons with hearing loss to achieve a more consistent experience for amplified gain level.²⁹⁷ TIA also asks the Commission to incorporate this standard into Part 68 in a manner that would allow the standard to be updated as needed, without additional rulemakings,²⁹⁸ and that the Commission clarify that this standard covers interconnected VoIP telephones.²⁹⁹ TIA also requests that the Commission heighten enforcement of Part 68 rules generally.³⁰⁰

appropriations, when the Commission could not conduct normal business operations. See CVAA, §§ 204(b), 205(b). The Commission adopted a report and order with final rules to implement these sections within two weeks after the government re-opened.

²⁹¹ 47 U.S.C. § 610; 47 C.F.R. § 20.19.

²⁹² *Id.*

²⁹³ CVAA, § 102(a)(1), amending 47 U.S.C. § 610(b)(1). Pursuant to Section 710(e) of the Act, in any rulemaking to implement the HAC provisions, "the Commission shall specifically consider the costs and benefits to all telephone users, including persons with and without hearing loss," in accordance with technical- and market-related parameters specified in this provision. 47 U.S.C. § 610(e).

²⁹⁴ CVAA, § 102(b), amending 47 U.S.C. § 610(c). The Commission is directed to consult with the public in establishing or approving such technical standards. 47 U.S.C. § 610(c).

²⁹⁵ CVAA § 102(a)(2), amending 47 U.S.C. § 610(b)(2)(B).

²⁹⁶ Telecommunications Industry Association, Access to Telecommunications Equipment and Services by Persons with Disabilities, RM-11682, Petition for Rulemaking (filed Oct. 25, 2012) (TIA Petition) (seeking to revise the Commission's rules to reference the most recent TIA HAC volume control standard). See also 47 C.F.R. § 68.317.

²⁹⁷ TIA Petition at 4.

²⁹⁸ *Id.* at 7.

²⁹⁹ *Id.* at 16, n.27.

TIA claims that incorporation of the new standard would also improve access for hard of hearing consumers to emergency services, lead to harmonization across agencies and internationally,³⁰¹ and provide regulatory certainty for manufacturers who seek to comply with Part 68.³⁰² On July 19, 2013, CGB released a public notice seeking comment on the TIA Petition.³⁰³ This matter is now pending with the Commission.

B. Section 103. Relay Services

77. Section 103(a) of the CVAA revises the definition of telecommunications relay services (TRS) and Section 103(b) requires voice over Internet protocol (VoIP) service providers to contribute to the interstate telecommunications relay service fund (TRS Fund).³⁰⁴

78. *Definition of TRS.* The amended definition specifically identifies and includes individuals who are deaf-blind within the categories of individuals that are covered by the TRS provisions of the Act.³⁰⁵ Since the *2012 CVAA Biennial Report*, on July 29, 2014, the Commission met with members and representatives of DeafBlind Citizens in Action (DBCA). Commission staff also hosted an information booth, made presentations, and participated in the International Deaf-Blind Expo in Las Vegas, Nevada, on August 1-2, 2014. The Commission engaged in these activities to learn more about the unique and varied communications technology challenges faced by individuals who are deaf-blind, as well as possible solutions to those challenges. The Commission is committed to continuing efforts to ensure access to communications by this underserved population.

79. The CVAA's amended definition of TRS also eliminates the limitation of providing relay services only for calls between a person with a hearing or speech disability and a person without a hearing or speech disability.³⁰⁶ The amended definition enables the use of relay services between and among individuals with disabilities, such as when two or more individuals with different types of disabilities (e.g., hearing loss and speech disability) need more than one kind of relay service (e.g., video relay service and speech-to-speech TRS) to complete a single relay call.³⁰⁷ Since the *2012 CVAA Biennial*

³⁰⁰ *Id.* at 11.

³⁰¹ *Id.* at 13, 16.

³⁰² *Id.* at 15-16.

³⁰³ *Request for Comment on Petition for Rulemaking Filed by the Telecommunications Industry Association Regarding Hearing Aid Compatibility Volume Control Requirements*, CG Docket No. 13-46, Public Notice, DA 13-1601, 28 FCC Rcd 10338 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1601A1.pdf.

³⁰⁴ CVAA, §§ 103(a) and (b).

³⁰⁵ CVAA, § 103(a), amending Section 225(a)(3) of the Act, 47 U.S.C. § 225(a)(3). The new definition is as follows:

The term “telecommunications relay services” means telephone transmission services that provide the ability for an individual who is deaf, hard of hearing, deaf-blind, or who has a speech disability to engage in communication by wire or radio with one or more individuals, in a manner that is functionally equivalent to the ability of a hearing individual who does not have a speech disability to communicate using voice communication services by wire or radio.

See also Title IV of the Americans with Disabilities Act of 1990 (ADA), Pub. Law 101-336, 104 Stat. 327.

³⁰⁶ *Id.*

³⁰⁷ S. Rep. No. 111-386 at 7 (2010) (Senate Report); H.R. Rep. No. 111-563 at 23 (2010) (House Report).

Report, in August 2014, the Commission sought comment on amending the definition of TRS in the Commission's rules to conform it to the definition of TRS as amended by the CVAA, and to allow TRS providers to be compensated for TRS calls between two or more individuals with disabilities using different types of relay services.³⁰⁸

80. *VoIP Contributions to the TRS Fund.* Section 103(b) of the CVAA adds new Section 715 to the Act requiring interconnected and non-interconnected voice over Internet protocol (VoIP) service providers to participate in and contribute to the TRS Fund by October 8, 2011, in a manner prescribed by regulation that is consistent with and comparable to the obligations of other contributors. Although providers of interconnected VoIP services have been contributing to the TRS Fund since 2007,³⁰⁹ the CVAA, in effect, codifies this obligation, and extends it to non-interconnected VoIP providers. As required by the CVAA, the Commission adopted rules implementing this provision.³¹⁰ These rules require non-interconnected VoIP service providers to register with the Commission and designate a District of Columbia agent for service of process, and to complete and submit FCC Form 499-A annually by April 1 to report interstate end-user revenues, which serve as the basis for TRS Fund contributions.³¹¹ The obligations of non-interconnected VoIP service providers are consistent with and comparable to the obligations of other TRS Fund contributors.³¹² Since these rules became effective on November 25, 2011,³¹³ we believe that non-interconnected VoIP service providers generally have complied with the new requirements.

C. Section 104. Access to Advanced Communications Services and Equipment

81. Section 104(a) of the CVAA adds Sections 716, 717, and 718 to the Act as follows.³¹⁴

³⁰⁸ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Waivers of iTRS Mandatory Minimum Standards*, CG Docket No. 03-123, Report and Order, Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, FCC 14-125, 29 FCC Rcd ___, ___, ¶¶ 62-66 (rel. Aug. 22, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-125A1.pdf. See also 47 C.F.R. § 64.610(a)(32).

³⁰⁹ On May 31, 2007, the Commission extended Section 225's TRS requirements to interconnected VoIP service providers, including the requirement that such providers contribute to the TRS Fund. See *Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities; Telecommunications Relay Services and Speech-to-Speech Services for Individuals With Hearing and Speech Disabilities*, WT Docket Nos. 04-36, 96-198, CG Docket No. 03-123, CC Docket No. 92-105, Report and Order, FCC 07-110, 22 FCC Rcd 11275, 11291-97, ¶¶ 32-43 (2007).

³¹⁰ CVAA, § 103(b); 47 U.S.C. § 616. See also *Contributions to the Telecommunications Relay Services Fund*, CG Docket No. 11-47, Report and Order, FCC 11-150, 26 FCC Rcd 14532 (2011) (*TRS Contribution Report and Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-11-150A1.pdf. See also 47 C.F.R. §§ 1.47(h), 64.601, and 64.604(c)(5)(iii), as amended.

³¹¹ *TRS Contributions Report and Order*, 26 FCC Rcd at 14543, 14545-6, ¶¶ 23, 31.

³¹² See, e.g., *id.*, 26 FCC Rcd at 14538, ¶ 14 (all TRS Fund contributions are assessed against interstate end-user revenues).

³¹³ See 76 Fed. Reg. 65965 (Oct. 25, 2011).

³¹⁴ CVAA, § 104(a), adding Sections 716, 717, and 718 to the Act, codified at 47 U.S.C. §§ 617, 618, and 619. Section 104(b) of the CVAA establishes October 8, 2013 as the effective date for Section 718 of the Act. CVAA, § 104(b). Sections 104(c) and (d) of the CVAA established forfeiture penalties for violations of Section 255, 716, or 718 of the Act, and the right to appeal Commission determinations of such complaints to the United States Court of Appeals for the District of Columbia. CVAA, §§ 104(c) and (d).

- Section 716 establishes accessibility requirements for advanced communications services and equipment.³¹⁵
- Section 717:
 - (a) establishes new recordkeeping and enforcement requirements for Sections 255, 716, and 718;³¹⁶
 - (b) requires the Commission to submit biennial reports to Congress;
 - (c) requires the Comptroller General to conduct a study and report to Congress by October 8, 2015;
 - (d) requires the Commission to establish an accessibility clearinghouse; and
 - (e) requires the Commission to conduct an information and educational program.³¹⁷
- Section 718 requires Internet browsers built into mobile phones to be accessible to individuals who are blind or have a visual impairment.³¹⁸

82. As required by the CVAA, the Commission adopted rules to implement Sections 716 and 717(a) of the Act.³¹⁹ As a result of these rules, since January 30, 2012, advanced communications service providers and equipment manufacturers have been required to take accessibility into account in the design of their products and services.³²⁰ In addition, advanced communications services and equipment that have been introduced into the market or substantially upgraded on or after October 8, 2013, have had to comply with the Commission's rules implementing Section 716 of the Act.³²¹

83. Since the *2012 CVAA Biennial Report*, the Commission achieved the following additional implementation milestones pursuant to Section 104 of the CVAA:

- *Recordkeeping.* Beginning January 30, 2013, in accordance with Section 717 of the Act, manufacturers and service providers that are subject to Sections 255, 716, and 718 of the Act have had to keep records pertaining to the accessibility of their products and services.³²² The

³¹⁵ 47 U.S.C. § 617.

³¹⁶ Section II.A of this *Report* provides brief summaries of Sections 255, 716, and 718.

³¹⁷ 47 U.S.C. §§ 618(a)-(e).

³¹⁸ 47 U.S.C. § 619.

³¹⁹ *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; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision*, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-151, 26 FCC Rcd 14557 (2011) (*ACS Report and Order* and *ACS FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-11-151A1.pdf. See also 47 C.F.R. Part 14.

³²⁰ See *ACS Report and Order*, 26 FCC Rcd at 14602, 14696, ¶¶ 108, 328. See also 76 Fed. Reg. 82240 (Dec. 30, 2011).

³²¹ *ACS Report and Order*, 26 FCC Rcd at 14602-3, ¶ 110. The rules do not apply to customized equipment or services that are not offered directly to the public. 47 U.S.C. § 617(i); 47 C.F.R. § 14.3.

³²² 47 U.S.C. § 618(a)(5)(A).

Commission established a web-based system called the Recordkeeping Compliance Certification and Contact Information Registry (RCCCI Registry) to facilitate compliance with these recordkeeping requirements.³²³ Covered entities must certify annually that they are keeping records of their efforts to implement the accessibility requirements mandated under Sections 255, 716, and 718 of the Act.³²⁴ In addition, covered entities must provide contact information for both persons within their companies charged with resolving complaints and agents designated for service of complaints.³²⁵ The first annual recordkeeping certification and contact information filing was due by April 1, 2013.³²⁶ The following year, in a public notice, the Commission reminded covered entities of their recordkeeping obligations, along with their obligation to file their annual recordkeeping certifications and contact information in the RCCCI Registry by April 1, 2014.³²⁷

- *Implementation of Section 718.* On April 29, 2013, the Commission adopted rules to implement Section 718 of the Act,³²⁸ requiring Internet browsers built into mobile phones to be accessible to individuals who are blind or visually impaired.³²⁹ These rules, which went into effect on October 8, 2013,³³⁰ are consistent with the Commission's rules implementing Section 716 defining covered entities' obligations to make their advanced communications services and equipment accessible.³³¹ The Commission also affirmed that the rules it adopted with respect to the recordkeeping requirements mandated by Section 717 of the Act are applicable to manufacturers and service providers that are subject to Section 718.³³²
- *New Complaint Procedures.* In a public notice dated November 13, 2013, the Commission announced the establishment of new procedures, effective October 8, 2013, for filing

³²³ *Accessibility Recordkeeping Compliance and Contact Information Reporting Requirements for Entities Subject to Sections 255, 716, and 718 of the Communications Act*, Public Notice, DA 13-114, 28 FCC Rcd 415 (CGB 2013) (2013 RCCCI Registry Notice), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-114A1.pdf.

³²⁴ 47 C.F.R. § 14.31(a). Specifically, covered entities must keep records of their efforts to consult with people with disabilities, descriptions of the accessibility features of their products and services, and information about the compatibility of their products and services with peripheral devices or specialized customer premises equipment commonly used by people with disabilities to achieve access. *Id.*

³²⁵ 47 C.F.R. § 14.31(b).

³²⁶ 2013 RCCCI Registry Notice, 28 FCC Rcd at 415.

³²⁷ *Accessibility Recordkeeping Compliance and Contact Information Reporting Requirements for Entities Subject to Sections 255, 716, and 718 of the Communications Act*, Public Notice, DA 14-354, 29 FCC Rcd 2827 (CGB 2014) (2014 RCCCI Registry Reminder), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-354A1.pdf.

³²⁸ 47 U.S.C. § 619.

³²⁹ *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; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision*, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Second Report and Order, FCC 13-57, 28 FCC Rcd 5957 (2013) (*Second Report and Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-57A1.pdf.

³³⁰ CVAA § 104(b); *Second Report and Order*, 28 FCC Rcd at 5966, ¶ 16.

³³¹ *Second Report and Order*, 28 FCC Rcd at 5966-67, ¶ 17; 47 C.F.R. §§ 14.60-61.

³³² *Second Report and Order*, 28 FCC Rcd at 5973, ¶ 34; 47 C.F.R. § 14.31.

complaints alleging violations of Sections 255, 716, or 718 of the Act.³³³ The Commission also established the following web-based systems to help consumers: (1) find contact information for a company's accessibility customer care representative; (2) request assistance from the FCC's Disability Rights Office to resolve accessibility problems; and (3) file informal complaints alleging noncompliance with these sections of the Act with the FCC's Enforcement Bureau.³³⁴ These complaint procedures, established pursuant to Section 717(a) of the Act, became effective on October 8, 2013.³³⁵

In addition, on June 10, 2014, the Commission launched a new consumer support service specifically designed to enable direct videophone communication with consumers who are deaf or hard of hearing and use American Sign Language (ASL).³³⁶ The new ASL Consumer Support Line is operated by the Disability Rights Office. The ASL consumer specialist who staffs this videophone is able to respond to consumer inquiries on CVAA-related matters and provide assistance to consumers wishing to file complaints.³³⁷

- *Waivers*.³³⁸ On October 15, 2012, the Commission granted waivers of its advanced communication services accessibility rules, until October 8, 2015, for certain classes of equipment and services: Internet protocol-enabled televisions; Internet-enabled digital video players; cable set-top boxes; and gaming consoles, services, and software.³³⁹ These waivers were granted in response to petitions filed by the Consumer Electronics Association (CEA),³⁴⁰ the National Cable & Telecommunications Association (NCTA),³⁴¹ and the

³³³ *New Procedures for Telecommunications and Advanced Communications Accessibility Complaints*, Public Notice, DA 13-2177, 28 FCC Rcd 15712 (CGB 2013) (*Complaint Procedures Notice*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-2177A1.pdf.

³³⁴ *Id.* See also ¶¶ 54-55, *supra* (summarizing the new complaint procedures).

³³⁵ 47 C.F.R. § 14.30(c). See also 47 C.F.R. §§ 14.32 (consumer dispute assistance), 14.34-14.37 (informal complaints), 14.38-14.52 (formal complaints).

³³⁶ *FCC Launches Support Line for Consumers who Are Deaf and Hard of Hearing Using American Sign Language Over Videophone: FCC's Video Consumer Support Service Is the First of Its Kind Among Federal Government Agencies*, News Release (Jun. 10, 2014), available at <http://www.fcc.gov/document/fcc-adds-american-sign-language-consumer-support-line-videophone>.

³³⁷ In addition, consumers may use the ASL Consumer Support Line to obtain information on a wide range of general telecommunications matters, such as billing and cramming issues, as well as non-CVAA disability-related matters.

³³⁸ The Commission has procedures for the filing and consideration of petitions for waiver from the accessibility rules for multipurpose services and equipment that is capable of accessing an advanced communications service, but is designed primarily for purposes other than using advanced communications services. See 47 U.S.C. § 617(h)(1); 47 C.F.R. § 14.5.

³³⁹ *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; Consumer Electronics Association; National Cable & Telecommunications Association; Entertainment Services Association; Petitions for Class Waivers of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advanced Communications Services (ACS) and Equipment by People with Disabilities*, CG Docket 10-213, Order, DA 12-1645, 27 FCC Rcd 12970 (CGB 2012) (*CEA, NCTA, ESA Waiver Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1645A1.pdf.

³⁴⁰ Consumer Electronics Association Petition for Waiver, CG Docket No. 10-213 (filed Mar. 22, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021902799> (requesting a waiver for Internet protocol-enabled television sets and Internet protocol-enabled digital video players manufactured before July 1, 2016).

Entertainment Software Association (ESA).³⁴² The Commission granted each waiver after finding that these classes of multipurpose equipment are capable of accessing advanced communications services, but are designed primarily for purposes other than using advanced communications services.³⁴³

On January 28, 2014, the Commission also granted a waiver of its advanced communications services accessibility rules, until January 28, 2015, for a single class of equipment: basic e-readers.³⁴⁴ This waiver was granted in response to a petition filed by a coalition of e-reader manufacturers consisting of Amazon.com, Inc., Kobo Inc., and Sony Electronics Inc.³⁴⁵ The Commission defined the class of basic e-readers to include any mobile electronic device that is capable of accessing advanced communications services, designed primarily for the purpose of reading text-based digital works, such as books and periodicals, and meets each of the following requirements:

- (1) the device has no LCD screen, but rather utilizes a screen that is designed to optimize reading;
- (2) the device has no camera;
- (3) the device is not offered or shipped to consumers with built-in advanced communications service client applications and the device manufacturer does not develop advanced communications service applications for its respective device, but

³⁴¹ National Cable & Telecommunications Association Petition for Waiver, CG Docket No. 10-213 (filed Jun. 1, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021921284> (requesting a waiver for set-top boxes leased by cable operators to their customers and manufactured before July 1, 2016).

³⁴² Petition of the Entertainment Software Association, CG Docket No. 10-213 (filed Mar. 21, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021902591> (requesting an eight-year waiver until October 8, 2012, for gaming consoles, services, and software).

³⁴³ *CEA, NCTA, ESA Waiver Order*, 27 FCC Rcd at 12975-76, 12980, 12987, ¶¶ 10, 18, 35. These waivers were granted after the receipt of public comment on each petition. *See Request for Comment; Petition for Class Waiver of Commission's Rules for Access to Advanced Communications Services and Equipment by People with Disabilities*, CG Docket No. 10-213, Public Notice, DA 12-759, 27 FCC Rcd 5202 (CGB 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-759A1.pdf.

³⁴⁴ *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; Coalition of E-Reader Manufacturers' Petition for Class Waiver of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advance Communications Services (ACS) and Equipment by People with Disabilities*, CG Docket No. 10-213, Order, DA 14-95, 29 FCC Rcd 674 (CGB 2014) (*E-Reader Waiver Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-95A1.pdf. *See also Request for Comment Petition for Class Waiver of Commission's Rules for Access to Advanced Communications Services and Equipment by People with Disabilities*, CG Docket No. 10-213, Public Notice, DA 13-1686, 28 FCC Rcd 11147 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1686A1.pdf (seeking comment on the petition). The Coalition of E-Reader Manufacturers filed a new petition to extend the waiver beyond January 28, 2015. *See Coalition of E-Reader Manufacturers Petition for Extension of Waiver*, CG Docket 10-213 (filed Sept. 4, 2014), available at <http://apps.fcc.gov/ecfs/document/view?id=7521827908>. *See also Request for Comment on Petition for Extension of Class Waiver of Commission's Rules for Access to Advanced Communications Services and Equipment by People with Disabilities*, CG Docket No. 10-213, Public Notice, DA 14-1403, 29 FCC Rcd ___ (CGB, rel. Sept. 26, 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1403A1.pdf (seeking comment on the petition for an extension).

³⁴⁵ Coalition of E-Reader Manufacturers Petition for Waiver, CG Docket 10-213 (filed May 16, 2013), available at <http://apps.fcc.gov/ecfs/document/view?id=7022314526>.

- the device may be offered or shipped to consumers with a browser and social media applications; and
- (4) the device is marketed to consumers as a reading device and promotional material about the device does not tout the capability to access advanced communications services.³⁴⁶

84. *Accessibility Clearinghouse.* Section 717(d) of the Act requires the Commission, within one year after the enactment of the CVAA, or by October 8, 2011, to establish a clearinghouse of information on the availability of accessible products and services and accessibility solutions required under Sections 255, 716, and 718 of the Act.³⁴⁷ The clearinghouse information must be made publicly available on the Commission's website and by other means, and must include an annually updated list of products and services with access features.³⁴⁸

85. The Commission launched its Accessibility Clearinghouse, available at <http://fcc.gov/AccessibilityClearinghouse>, in October 2011. The Accessibility Clearinghouse is a web-based repository of information about accessibility solutions for telecommunications and advanced communications services and equipment. Among other things, it contains an online database that consumers can use to search for wireless handsets with accessibility features that meet the needs of various disabilities, as well as information about accessibility applications and assistive technology solutions, and organizations supporting accessible telecommunications. Since the *2012 CVAA Biennial Report*, the Commission has made some feature improvements in this database. In addition, the Commission is now working with industry associations to explore the development and inclusion of additional data sets in the Accessibility Clearinghouse.³⁴⁹

86. *Outreach and Education.* Section 717(e) of the Act requires the Commission to conduct an informational and educational program designed to inform the public about the availability of the Accessibility Clearinghouse and the protections and remedies available under Sections 255, 716, and 718 of the Act.³⁵⁰

87. Since the *2012 CVAA Biennial Report*, Commission staff have made presentations and disseminated information about the CVAA, the Accessibility Clearinghouse, and consumer rights and remedies available under Sections 255, 716, and 718 of the Act at numerous local, national, and international conferences and events attended by individuals with disabilities, industry representatives, developers, educators, and other members of the public.³⁵¹ In addition, the Commission has developed and regularly updates consumer guides about the CVAA and the Commission's implementing regulations.³⁵² The Commission plans to continue these outreach and educational activities in the future.

³⁴⁶ *E-Reader Waiver Order*, 29 FCC Rcd at 682-683, ¶ 15. These characteristics distinguish basic e-readers from a broader class of devices, such as tablets, that have e-reader functions or features but are more commonly marketed and used for purposes associated with advanced communications services. *Id.*, 29 FCC Rcd at 682, ¶ 15.

³⁴⁷ 47 U.S.C. § 618(d).

³⁴⁸ *Id.*

³⁴⁹ Companies wishing to contribute information about accessibility solutions may contact Clearinghouse@fcc.gov.

³⁵⁰ 47 U.S.C. § 618(e).

³⁵¹ These events are listed in Appendix C to this *Report*.

³⁵² A list of these consumer guides is provided in Appendix D to this *Report*.

D. Section 105. National Deaf-Blind Equipment Distribution Program³⁵³

88. Section 105 of the CVAA adds Section 719 to the Act, which authorizes support for programs that distribute equipment designed to make telecommunications services, Internet access, and advanced communications accessible by low-income individuals who are deaf-blind.³⁵⁴ Section 719(a) directs the Commission to establish rules that define as eligible for support those programs approved by the Commission for the distribution of such equipment.³⁵⁵ Section 719(c) authorizes the Commission to allocate \$10 million annually from the interstate TRS Fund for this purpose.³⁵⁶

89. In July 2012, the Commission launched the National Deaf-Blind Equipment Distribution Program (NDBEDP) as a two-year pilot program, with the option of extending the pilot program for a third year.³⁵⁷ Since then, the Commission certified and provided funding to 53 entities to participate in the NDBEDP – one entity in each state, plus the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.³⁵⁸ In addition, the Commission allocated \$500,000 per year, of the \$10 million allocated for the pilot program, for national outreach.³⁵⁹ A national outreach coordinator selected by the Commission has used this funding for extensive outreach efforts, including establishment of a website (www.iCanConnect.org), a web presence through social media outlets, and production of print materials, public service announcements, and other mass media marketing deliverables.³⁶⁰ These national outreach

³⁵³ Although Section 105 of the CVAA is entitled “Relay services for deaf-blind individuals,” this section actually authorizes financial support for programs that distribute communications equipment to low-income individuals who are deaf-blind, which the Commission refers to as the “National Deaf-Blind Equipment Distribution Program.”

³⁵⁴ CVAA, § 105, adding Section 719 to the Act, codified at 47 U.S.C. § 620.

³⁵⁵ 47 U.S.C. § 620(a).

³⁵⁶ 47 U.S.C. § 620(c).

³⁵⁷ *Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, Section 105, Relay Services for Deaf-Blind Individuals*, CG Docket No. 10-210, Report and Order, FCC 11-56, 26 FCC Rcd 5640 (2011) (*NDBEDP Pilot Program Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-11-56A1.pdf. See also 47 C.F.R. § 64.610; *Commission Announces Launch of the National Deaf-Blind Equipment Distribution Program*, CG Docket No. 10-210, Public Notice, DA 12-1051, 27 FCC Rcd 7403 (CGB 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1051A1.pdf.

³⁵⁸ *NDBEDP Pilot Program Order*, 26 FCC Rcd at 5646, ¶ 12. See also *Commission Announces Entities Certified to Participate in the National Deaf-Blind Equipment Distribution Program*, CG Docket No. 10-210, Public Notice, DA 12-1050, 27 FCC Rcd 7397 (CGB 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1050A1.pdf. Eligible individuals must be “deaf-blind,” as defined in the Helen Keller National Center Act. See 47 U.S.C. § 620(b), citing 29 U.S.C. § 1905(2). See also *NDBEDP Pilot Program Order*, 26 FCC Rcd at 5650-2, ¶¶ 23-27. Eligible individuals must also be “low income,” which the Commission defined as having income that does not exceed 400% of the Federal Poverty Guidelines. See 47 U.S.C. § 620(a); 47 C.F.R. § 64.610(d)(2). See also *NDBEDP Pilot Program Order*, 26 FCC Rcd at 5654-7, ¶¶ 33-37.

³⁵⁹ *NDBEDP Pilot Program Order*, 26 FCC Rcd at 5676, ¶ 80. See also *Perkins School for the Blind to Conduct National Outreach for the National Deaf-Blind Equipment Distribution Program*, CG Docket No. 10-210, Public Notice, DA 12-910, 27 FCC Rcd 6143 (CGB 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-910A1.pdf (selecting the Perkins School for the Blind, in partnership with the Helen Keller National Center and FableVision, to conduct national outreach for the pilot NDBEDP).

³⁶⁰ Year One Highlights (September 2013) at 2-5 (a presentation produced by the Perkins School for the Blind summarizing national outreach efforts and outcomes achieved by NDBEDP certified programs), available at <http://apps.fcc.gov/ecfs/document/view?id=7520958851>.

efforts supplement the state and local outreach activities conducted by certified programs to inform deaf-blind residents of their states about the NDBEDP.³⁶¹

90. Since the *2012 CVAA Biennial Report*, two full years of the NDBEDP pilot program have been completed.³⁶² During this period, after establishing administrative and operational procedures and identifying eligible participants, certified programs began distributing equipment and providing related services to individuals who meet the program's eligibility criteria. Initially, utilization of NDBEDP funding across the states varied considerably, but by the close of the first year, from July 1, 2012 to June 30, 2013, almost 70 percent of the \$10 million available had been used.³⁶³ The second year of the NDBEDP pilot program began July 1, 2013 and ended on June 30, 2014.³⁶⁴ During that period, utilization increased across the states, with approximately 90 percent of the \$10 million available being used.³⁶⁵

91. The Commission has extended the NDBEDP pilot program for a third year, which began July 1, 2014 and will end June 30, 2015.³⁶⁶ During the third year of the NDBEDP, the Commission will conduct a rulemaking proceeding to develop a permanent NDBEDP, which will largely be informed by experiences acquired in operating the NDBEDP pilot program.³⁶⁷ To assist in this effort, on August 1, 2014, the Commission released a public notice seeking comments on ways to make the permanent NDBEDP more effective and more efficient, based on these experiences.³⁶⁸

E. Section 106. Emergency Access Advisory Committee

92. The CVAA directed the Commission to establish an Emergency Access Advisory Committee (EAAC) to conduct a national survey to determine the most effective and efficient technologies and methods by which to enable access to emergency services by individuals with

³⁶¹ *NDBEDP Pilot Program Order*, 26 FCC Rcd at 5675-76, ¶ 79-80.

³⁶² During the first two years of the NDBEDP pilot program, the entities selected to participate in the NDBEDP for seven states (Nevada, Mississippi, Vermont, Nebraska, Indiana, Minnesota, and Iowa) relinquished their certifications. The Commission certified other entities to continue distributing NDBEDP equipment and providing related services to eligible individuals in those states. See <http://www.fcc.gov/ndbedp>.

³⁶³ See 2012-2013 NDBEDP Reimbursement Requests at <http://r-l-s-a.com/TRS/2012-2013%20NDBEDP%20Reimbursement%20requests.xlsx> (last viewed Sept. 5, 2014).

³⁶⁴ See *Bureau Announces 2013-2014 State Allocations for the National Deaf-Blind Equipment Distribution Program*, Public Notice, DA 13-1488, 28 FCC Rcd 9243 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1488A1.pdf.

³⁶⁵ See 2013-2014 NDBEDP Reimbursement Requests at <http://www.r-l-s-a.com/TRS/2013-2014%20NDBEDP%20Reimbursement%20requests.xlsx> (last viewed Sept. 5, 2014).

³⁶⁶ *Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, Section 105, Relay Services for Deaf-Blind Individuals; Order Extending NDBEDP Pilot Program to June 30, 2015*, CG Docket No. 10-210, Order, DA 14-170, 29 FCC Rcd 1234 (CGB 2014) (*NDBEDP Pilot Program Third Year Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-170A1.pdf. See also *Bureau Announces 2014-2015 State Allocations for the National Deaf-Blind Equipment Distribution Program*, Public Notice, DA 14-947, 29 FCC Rcd 8056 (CGB 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-947A1.pdf.

³⁶⁷ *NDBEDP Pilot Program Third Year Order*, 29 FCC Rcd at 1236, ¶ 7.

³⁶⁸ *Consumer and Governmental Affairs Bureau Seeks Comment on the National Deaf-Blind Equipment Distribution Program*, CG Docket No. 10-210, Public Notice, DA 14-1128, 29 FCC Rcd 9451 (CGB 2014), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0801/DA-14-1128A1.pdf.

disabilities and to submit to the Commission recommendations to implement such technologies and methods.³⁶⁹ The CVAA authorizes the Commission to then promulgate regulations to implement the recommendations proposed by the EAAC, as well as any other regulations, technical standards, protocols, and procedures as are necessary to achieve reliable, interoperable communication that ensures access by individuals with disabilities to an Internet protocol-enabled emergency network, where achievable and technically feasible.³⁷⁰

93. As directed by the CVAA, the Commission established the EAAC on December 7, 2010.³⁷¹ The EAAC conducted a national survey and submitted its survey report to the Commission on July 21, 2011.³⁷² The EAAC submitted its report containing recommendations to the Commission on December 6, 2011.³⁷³

94. Since the *2012 CVAA Biennial Report*, the EAAC has submitted additional reports to the Commission. In March 2013, the EAAC submitted reports setting forth the following: (1) recommendations for sending text messages to 911 (text-to-911);³⁷⁴ (2) recommendations to ensure effective communication to individuals with disabilities in next generation 911 (NG9-1-1) environments;³⁷⁵ and (3) information about the sustainability of TTY communication services and proposed solutions for new text communications that can achieve improved functionalities for people who are deaf, hard of hearing, deaf-blind, or who have a speech disability.³⁷⁶ On June 14, 2013, the EAAC submitted three more reports, each of which provided guidance on issues related to text-to-911 and legacy equipment.³⁷⁷ The EAAC submitted its final report on July 10, 2013, on gaps in the National Emergency Number Association (NENA) “Detailed Functional and Interface Standards for the NENA i3 Solution,”

³⁶⁹ CVAA, §§ 106(a), (c).

³⁷⁰ CVAA, § 106(g).

³⁷¹ *Emergency Access Advisory Committee Announcement of Members*, Public Notice, DA 10-2318, 25 FCC Rcd 17084 (CGB 2010), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-10-2318A1.pdf.

³⁷² EAAC, *Report on Emergency Calling for Persons with Disabilities Survey Review and Analysis 2011 (EAAC Survey Report)* (Jul. 21, 2011), available at <http://transition.fcc.gov/cgb/dro/EAAC/EAAC-REPORT.pdf> (reporting on 3149 completed surveys).

³⁷³ EAAC, *Emergency Access Advisory Committee Report and Recommendations (EAAC Report and Recommendations)* (Dec. 6, 2011), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-312161A1.pdf.

³⁷⁴ EAAC, *Report of Emergency Access Advisory Committee (EAAC) Subcommittee 1 on Interim Text Messaging to 9-1-1* (Mar. 1, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319329A1.pdf.

³⁷⁵ EAAC, *Emergency Access Advisory Committee (EAAC) Working Group 3 Recommendations on Current 9-1-1 and Next Generation 9-1-1: Media Communication Line Services Used to Ensure Effective Communication with Callers with Disabilities* (Mar. 1, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319394A1.pdf.

³⁷⁶ EAAC, *Emergency Access Advisory Committee (EAAC) Report on TTY Transition* (Mar. 11, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319386A1.pdf.

³⁷⁷ EAAC, *Emergency Access Advisory Committee (EAAC) Report on procedures for calls between TTY users and NG9-1-1 PSAPs* (Jun. 14, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321705A1.pdf; EAAC, *Emergency Access Advisory Committee (EAAC) Proposed procedures for the TTY as a text terminal in legacy 9-1-1 PSAPs without IP connection* (Jun. 14, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321704A1.pdf; and EAAC, *Emergency Access Advisory Committee (EAAC) Working Group 7 Report on Recommendations on Time Alignment* (Jun. 14, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321740A1.pdf.

Document Number 08-003 (NENA i3) pertaining to accessible emergency services.³⁷⁸ The EAAC recommended that these gaps be taken into consideration in future revisions of NENA i3 and that all EAAC reports be considered during the implementation of NG9-1-1 in order to make sure that support for accessibility is implemented from the beginning and throughout the Commission's proceedings on consumer access to 911 services.³⁷⁹

95. Pursuant to its CVAA authorization to promulgate regulations to implement the recommendations proposed by the EAAC,³⁸⁰ in December 2012, the Commission sought comments on proposed rules to require all wireless carriers, including certain providers of text messaging applications, to enable their customers to send text messages to 911 where PSAPs are prepared to receive these messages.³⁸¹ Around the same time, the four largest wireless carriers made a voluntary commitment to make text-to-911 possible by May 15, 2014.³⁸² However, because most PSAPs were not ready to accept text messages at the time, the Commission also proposed to require, by June 30, 2013, automated "bounce-back" error messages to consumers who send text messages to 911 centers unprepared to receive these messages.³⁸³ This proposal was modeled on a second voluntary commitment of the four largest wireless carriers to provide automatic bounce-back messages by June 30, 2013.³⁸⁴

96. On May 8, 2013, the Commission adopted rules requiring all wireless carriers and providers of interconnected text messaging services to provide, by September 30, 2013, an automatic bounce-back text message to consumers who try to send a text message to 911 where text-to-911 is not available.³⁸⁵ This message instructs consumers that text-to-911 is not available and to contact emergency services by another means, such as by making a voice call to 911.³⁸⁶

97. On January 31, 2014, the Commission released a Policy Statement establishing a general goal for wireless and interconnected text messaging service providers to enable text messages to 911 and

³⁷⁸ EAAC, *Emergency Access Advisory Committee (EAAC) Report on gaps in NENA i3 NG9-1-1 specifications related to EAAC accessibility reports* (Jul. 10, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-322164A1.pdf.

³⁷⁹ *Id.* at 3.

³⁸⁰ CVAA, § 106(g).

³⁸¹ *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, PS Docket Nos. 11-153 and 10-255, Further Notice of Proposed Rulemaking, FCC 12-149, 27 FCC Rcd 15659 (2012) (*Text-to-911 FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-149A1.pdf.

³⁸² In December 2012, AT&T, Sprint Nextel, T-Mobile, and Verizon entered into a voluntary agreement with NENA and APCO International to provide text-to-911 service by May 15, 2014, to PSAPs capable of, and that requested to receive, text-to-911 service. *Text-to-911 FNPRM*, 27 FCC Rcd at 15742, Appendix C.

³⁸³ *Text-to-911 FNPRM*, 27 FCC Rcd at 15660-61, ¶¶ 2-3.

³⁸⁴ *Id.*, 27 FCC Rcd at 15661, ¶ 3.

³⁸⁵ *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, PS Dockets Nos. 11-153 and 10-255, Report and Order, FCC 13-64, 28 FCC Rcd 7556, 7576, ¶ 59 (2013) (*Bounce-Back Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-64A1.pdf. Interconnected text providers are providers of software applications that enable a consumer to send text messages to all or substantially all text-capable U.S. telephone numbers and receive text messages from the same. *Bounce-Back Order*, 28 FCC Rcd at 7556, ¶ 1.

³⁸⁶ *Bounce-Back Order*, 28 FCC Rcd at 7581, ¶ 69.

encouraging industry-developed solutions to achieve this goal.³⁸⁷ Acknowledging the leadership that had been shown by the voluntary commitment of the four largest wireless carriers to provide text-to-911 by May 15, 2014, the Commission encouraged other text providers to do the same.³⁸⁸ In an accompanying notice, the Commission sought comment on a proposal for text-to-911 to be made available by all text providers by December 31, 2014.³⁸⁹ The Commission also sought comment on several aspects of implementation, particularly relating to the technical ability of interconnected text providers to comply with a text-to-911 mandate, as well as longer-term text-to-911 issues.³⁹⁰

98. On August 8, 2014, the Commission adopted final rules establishing December 31, 2014, as the deadline for wireless and interconnected text messaging service providers (covered text providers) to be capable of supporting text-to-911.³⁹¹ The Commission noted the unique value of text-to-911 for millions of Americans with hearing or speech disabilities.³⁹² Covered text providers have until June 30, 2015, or six months from the date of a PSAP request, whichever is later, to implement text-to-911 for that PSAP.³⁹³ In addition to establishing these implementation deadlines, the Commission sought comment on technical issues related to the provision of enhanced location information and roaming support, as well as the capabilities of future texting services, such as real-time text, for all Americans, including Americans with disabilities.³⁹⁴

F. Section 201. Video Programming Accessibility Advisory Committee³⁹⁵

99. Section 201 of the CVAA directed the Commission to establish a Video Programming Accessibility Advisory Committee (VPAAC) to prepare two reports to the Commission.³⁹⁶ The first

³⁸⁷ *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, PS Docket Nos. 11-153 and 10-255, Policy Statement and Second Further Notice of Proposed Rulemaking, FCC 14-6, 29 FCC Rcd 1547, 1552, ¶ 10 (2014) (*Text-to-911 Policy Statement and Text-to-911 Second FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-6A1.pdf. Noting Americans' increasing reliance on text messaging, the Commission stated that access to 911 is a core value that should be maintained as technology changes. *Text-to-911 Policy Statement*, 29 FCC Rcd at 1548, ¶¶ 1-2.

³⁸⁸ *Id.*, 29 FCC Rcd at 1553, ¶ 16. The Commission expressed its intent to “pursue a technologically-neutral approach that provides platform-independent norms for all stakeholders, based on high-level functional standards set by the relevant stakeholders in industry and the public safety community.” *Id.*, 29 FCC Rcd at 1553, ¶ 15.

³⁸⁹ *Id.*, 29 FCC Rcd at 1554, ¶ 18.

³⁹⁰ See *Text-to-911 Second FNPRM*, 29 FCC Rcd at 1554-71, ¶¶ 20-66.

³⁹¹ *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, PS Docket Nos. 11-153 and 10-255, Second Report and Order and Third Further Notice of Proposed Rulemaking, FCC 14-118, 29 FCC Rcd 9846 (2014), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-118A1.pdf.

³⁹² *Id.*, 29 FCC Rcd at 9847, ¶ 1. Beyond the importance of text-to-911 for people with disabilities, the Commission noted the crucial role that text-to-911 can play in protecting life and property when making a voice call would be dangerous, impractical, or impossible. *Id.*

³⁹³ *Id.*, 29 FCC Rcd at 9851, ¶ 10.

³⁹⁴ *Id.*, 29 FCC Rcd at 9981-9903, ¶¶ 81-134.

³⁹⁵ Although the CVAA called this committee the “Video Programming and Emergency Access Advisory Committee,” the Commission has used the title “Video Programming Accessibility Advisory Committee” to establish the acronym “VPAAC,” rather than “VPEAAC,” to distinguish it from the Emergency Access Advisory Committee or “EAAC.” See Section III.E of this *Report, supra*, for more information about the EAAC.

³⁹⁶ CVAA, § 201.

report was to contain recommendations regarding the provision and delivery of closed captions of video programming delivered using Internet protocol (IP).³⁹⁷ The second report was to contain recommendations regarding the provision and delivery of video descriptions on video programming; the provision of accessible emergency information using Internet protocol or digital broadcast television;³⁹⁸ and the provision of accessible user interfaces for video programming apparatus and accessible video programming guides and menus provided by navigation devices.³⁹⁹

100. As noted in the *2012 CVAA Biennial Report*, the Commission timely established the VPAAC and announced the appointment of its members on December 7, 2010.⁴⁰⁰ The first meeting of the full VPAAC was held on January 13, 2011.⁴⁰¹ The VPAAC timely submitted its first report to the Commission with recommendations on closed captioning on July 13, 2011.⁴⁰² The Commission considered these recommendations during the rulemaking process it undertook to implement the closed captioning provisions of the CVAA, as described in Sections III.G and H of this *Report*.

101. On April 9, 2012, the VPAAC timely submitted its second report to the Commission with recommendations on video description, accessible emergency information, video programming apparatus user interfaces, and programming guides and menus provided by navigation devices.⁴⁰³ On April 24, 2012, the Commission sought comment on the VPAAC's second report to inform rulemaking proceedings pursuant to the CVAA, as described in Sections III.G, H, I, and J of this *Report*.⁴⁰⁴

³⁹⁷ CVAA, § 201(e)(1). Closed captioning is the visual display of the audio portion of video programming, which provides access to individuals who are deaf or hard of hearing. See 47 C.F.R. § 79.1(a)(4).

³⁹⁸ CVAA, §§ 201(e)(2)(A)-(E). Video description is audio narrated descriptions of a television program's key visual elements that are inserted into natural pauses in the program's dialogue, which makes video programming more accessible to individuals who are blind or visually impaired. 47 U.S.C. § 613(h)(1); 47 C.F.R. § 79.3(a)(3).

³⁹⁹ CVAA, §§ 201(e)(2)(F)-(H). See Section III.J of this *Report*, *infra* (summarizing accessibility requirements for navigation devices).

⁴⁰⁰ *Video Programming and Emergency Access Advisory Committee Announcement of Members*, Public Notice, DA 10-2320, 25 FCC Rcd 17094 (CGB 2010), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-10-2320A1.pdf.

⁴⁰¹ More information about the VPAAC is available at <http://www.fcc.gov/encyclopedia/video-programming-accessibility-advisory-committee-vpaac>.

⁴⁰² *First Report of the Video Programming Accessibility Advisory Committee on the Twenty-First Century Communications and Video Accessibility Act of 2010: Closed Captioning of Video Programming Delivered Using Internet Protocol* (Jul. 13, 2011), available at http://transition.fcc.gov/cgb/dro/VPAAC/First_VPAAC_Report_to_the_FCC_7-11-11_FINAL.pdf.

⁴⁰³ *Second Report of the Video Programming Accessibility Advisory Committee on the Twenty-First Century Communications and Video Accessibility Act of 2010* (Apr. 9, 2012): (1) *Video Description*, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-329400A1.pdf; (2) *Access to Emergency Information*, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-329401A1.pdf; and (3) *User Interfaces, and Video Programming Guides and Menus*, available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-329402A1.pdf.

⁴⁰⁴ *Media Bureau and Consumer and Governmental Affairs Bureau Seek Comment on Second VPAAC Report: Video Description and Access to Emergency Information*, MB Docket No. 12-107, Public Notice, DA 12-636, 27 FCC Rcd 4195 (MB 2012) available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-636A1.pdf; *Media Bureau and Consumer and Governmental Affairs Bureau Seek Comment on Second VPAAC Report: User Interfaces, and Video Programming Guides and Menus*, MB Docket No. 12-108, Public Notice, DA 12-635, 27 FCC Rcd 4191 (MB 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-635A1.pdf.

G. Section 202. Video Description and Closed Captioning

102. Section 202 of the CVAA amends the Act with respect to the provision of video description, accessible emergency information, closed captioning on video programming delivered using Internet protocol, and petitions for exemption from the closed captioning requirements.⁴⁰⁵ Each of these requirements is addressed, in turn, in this section.

103. *Video Description.* Section 202(a) of the CVAA amends Section 713 of the Act to require, one year after the enactment of the CVAA, the reinstatement of Commission regulations that mandated the provision of video description on video programming, with certain modifications.⁴⁰⁶ In addition, not later than one year after the completion of the phase-in of the reinstated regulations, or by July 1, 2013, the Commission was required to initiate an inquiry on video description and report to Congress one year after initiating that inquiry, i.e., by July 1, 2014.⁴⁰⁷ No later than October 8, 2016, six years after the enactment date of the CVAA, the Commission must extend the video description requirements to broadcast stations in the top 60 television markets.⁴⁰⁸ Two years after completing its report, the Commission may issue additional video description regulations for television programming, including increasing the requirement for video description by up to 75 percent (from 50 to 87.5 hours per quarter) for televised video programming.⁴⁰⁹ Nine years after the date of enactment of the CVAA, or by October 8, 2019, the Commission must submit to Congress another report assessing the provision of video description, particularly with respect to television markets outside the top 60.⁴¹⁰ Ten years after the date of enactment of the CVAA, or on October 8, 2020, the Commission is authorized to phase in the video description regulations for up to 10 additional television market areas each year.⁴¹¹

104. As required by the CVAA, the Commission reinstated the video description rules, effective October 8, 2011.⁴¹² Under the reinstated rules, since July 1, 2012, full-power affiliates of the top four commercial television broadcast networks (ABC, CBS, Fox, and NBC) located in the top 25 television markets (based on Nielsen ratings as of January 1, 2011) have been required to provide 50 hours per calendar quarter (about four hours per week) of video-described prime time and/or children's programming.⁴¹³ Also since July 1, 2012, multichannel video programming distributors (MVPDs) with 50,000 or more subscribers have been required to provide 50 hours per calendar quarter (about four hours per week) of video-described prime time and/or children's programming on each of the top five national

⁴⁰⁵ CVAA, § 202.

⁴⁰⁶ CVAA, § 202(a); 47 U.S.C. §§ 613(f)(1) and (2). The Commission adopted rules requiring video description in 2000, but those rules were vacated by the U.S. Court of Appeals for the District of Columbia Circuit. *Motion Picture Ass'n of America, Inc. v. Federal Communications Comm.*, 309 F.3d 796 (D.C. Cir. 2002).

⁴⁰⁷ 47 U.S.C. § 613(f)(3).

⁴⁰⁸ 47 U.S.C. §§ 613(f)(4)(C)(i) and (ii).

⁴⁰⁹ 47 U.S.C. §§ 613(f)(4)(A) and (B).

⁴¹⁰ 47 U.S.C. § 613(f)(4)(C)(iii).

⁴¹¹ 47 U.S.C. § 613(f)(4)(C)(iv).

⁴¹² *Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-43, Report and Order, FCC 11-126, 26 FCC Rcd 11847, 11848, ¶ 2 (2011) (*Video Description Report and Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-11-126A1.pdf; 47 C.F.R. § 79.3.

⁴¹³ *Video Description Report and Order*, 26 FCC Rcd at 11850-1, ¶ 5.

non-broadcast networks that they carry (as determined by Nielsen at three-year intervals).⁴¹⁴ Any broadcast station or MVPD, regardless of affiliation, location, or size, must pass through video description when provided if it has the technical capability to do so (the pass-through requirement), and if that technical capability is not being used for another purpose related to the programming, such as providing a Spanish language audio stream.⁴¹⁵ The Commission also established July 1, 2015 as the date by which the video description rules will be extended to broadcast station affiliates located in the top 60 television markets (based on Nielsen ratings as of January 1, 2015).⁴¹⁶

105. Since the *2012 CVAA Biennial Report*, on June 25, 2013, the Commission released a public notice seeking comment on video description of video programming delivered via both television and the Internet, to inform the preparation of the report to Congress required by the CVAA.⁴¹⁷ On June 30, 2014, the Commission timely submitted its video description report to Congress.⁴¹⁸ In this report, the Commission found that the availability of video description on television programming has provided substantial benefits for individuals who are blind or visually impaired, and that industry appears to have largely complied with the Commission's video description rules.⁴¹⁹ While the report notes that some broadcast stations are providing more video description than required,⁴²⁰ it also highlights consumer desires for the increased availability of video-described programming and easier access to this programming on consumer electronics equipment.⁴²¹ In addition, the report details consumer frustration with the lack of publicly available information about which television programs are video described and inadequate customer support service for video description.⁴²² Finally, the report highlights the benefits of and need for video description on IP-delivered video programming, noting both industry claims of technical challenges with providing such description, versus reports from consumer groups about the availability of current technologies to support a secondary audio stream to provide video description on IP-delivered content.⁴²³

⁴¹⁴ *Id.*, 26 FCC Rcd at 11850-1, ¶ 5. Currently, the top five non-broadcast networks are USA, Disney Channel, TNT, Nickelodeon, and TBS. *Id.*, 26 FCC Rcd at 11854, ¶ 12. ESPN and Fox News are excluded because they do not have at least 50 hours per quarter of prime time programming that is not live or near-live. *Id.*, 26 FCC Rcd at 11855, ¶ 14. The first update to the top five non-broadcast networks will be on July 1, 2015 based on the ratings for the time period from October 2013 to September 2014. 47 C.F.R. § 79.3(b)(4). *See also Video Description Report and Order*, 26 FCC Rcd at 11857, ¶ 18.

⁴¹⁵ *Id.*, 26 FCC Rcd at 11858, 11862, ¶¶ 20, 28.

⁴¹⁶ *Id.*, 26 FCC Rcd at 11855-6, ¶ 16.

⁴¹⁷ 47 U.S.C. § 613(f)(3); *Media Bureau Seeks Comment on Video Description in Video Programming Distributed on Television and on the Internet*, MB Docket No. 11-43, Public Notice, DA 13-1438, 28 FCC Rcd 9043 (MB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1438A1.pdf.

⁴¹⁸ *Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-43, Report to Congress, DA 14-945, 29 FCC Rcd 8011 (MB 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-945A1.pdf.

⁴¹⁹ *Id.*, 29 FCC Rcd at 8011, ¶ 1.

⁴²⁰ *Id.*, 29 FCC Rcd at 8019, ¶ 17 (noting that some stations provide up to 88 hours of video description per calendar quarter).

⁴²¹ *Id.*, 29 FCC Rcd at 8011, ¶ 1.

⁴²² *Id.*, 29 FCC Rcd at 8022, ¶ 24.

⁴²³ *Id.*, 29 FCC Rcd at 8035, 8038, ¶¶ 56, 66-67.

106. On April 8, 2013, in accordance with Section 203 of the CVAA, the Commission adopted rules for certain video programming apparatus to be capable of delivering video description to viewers.⁴²⁴ The new rules require apparatus designed to receive, play back, or record video programming to make a secondary audio stream available to facilitate the transmission and delivery of video description.⁴²⁵ The Commission accompanied its report and order adopting these rules with a further notice of proposed rulemaking that sought additional comment on video description pass-through obligations.⁴²⁶ Specifically, the Commission sought public input on whether an MVPD system that allows subscribers to access linear video programming provided via tablets, laptops, personal computers, smartphones, or similar devices, must pass through video description that is provided for that programming.⁴²⁷ It also asked whether to require tagging or labeling of content on the secondary audio stream to help consumers who are blind or visually impaired locate the appropriate video stream to access video description, when such content is present.⁴²⁸ This proceeding is pending before the Commission.

107. *Accessible Emergency Information.* Section 202(a) of the CVAA amends Section 713 of the Act to require the Commission to complete a proceeding, not later than one year after the second VPAAC report is submitted to the Commission, or by April 9, 2013, to identify methods and promulgate regulations that require video programming owners, providers, and distributors to convey emergency information in a manner that is accessible to individuals who are blind or visually impaired.⁴²⁹

108. Since the *2012 CVAA Biennial Report*, in November 2012, the Commission proposed rules to require the use of a secondary audio stream to provide emergency information aurally and concurrently with the emergency information that is conveyed visually during video programming other than newscasts.⁴³⁰ The secondary audio stream is also the mechanism for providing video description.⁴³¹

⁴²⁴ *Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013) (*Emergency Information and Video Description Order and FNPRM*) (adopting rules requiring accessible televised emergency information and that certain video programming apparatus be capable of delivering accessible emergency information and video description), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf. See also Section III.H of this Report, *infra*.

⁴²⁵ *Emergency Information and Video Description Order and FNPRM*, 28 FCC Rcd at 4906-07, 4909-10, 4913-16, ¶¶ 48-49, 52, 60-62.

⁴²⁶ *Id.*, 28 FCC Rcd at 4927-28, ¶¶ 83-84.

⁴²⁷ *Id.*

⁴²⁸ *Id.*, 28 FCC Rcd at 4928-29, ¶ 85.

⁴²⁹ CVAA, § 202(a); 47 U.S.C. § 613(g). The second VPAAC report was submitted to the Commission on April 9, 2012. See Section III.F of this Report, *supra*. See also 47 C.F.R. §§ 79.1 (defining video programming providers and distributors), 79.2 (defining emergency information).

⁴³⁰ *Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 12-107, Notice of Proposed Rulemaking, FCC 12-142, 27 FCC Rcd 14728, 14734-40, ¶¶ 7-18 (2012) (*Emergency Information and Video Description NPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-142A1.pdf. This rulemaking proceeding was informed by comments received about the VPAAC's second report. See n.404, *supra*. See also Section III.F of this Report, *supra*. In this proceeding, the Commission also sought comment on the implementation of CVAA requirements for certain video programming apparatus to make available accessible emergency information and video description. See Section III.H of this Report, *infra*.

109. On April 8, 2013, the Commission timely adopted rules requiring that emergency information provided in video programming be made accessible to individuals who are blind or visually impaired.⁴³² The new emergency information rules apply to video programming provided by television broadcast stations and MVPDs that are subject to Section 79.2 of the Commission's rules, and not to IP-delivered video programming.⁴³³ The new rules require emergency information that appears visually during a non-news program, such as information about emergencies appearing in a text crawl on the screen during a regularly scheduled program, to be provided aurally on a secondary audio stream.⁴³⁴ A verbatim aural translation of textual emergency information is not required,⁴³⁵ but the use of text-to-speech technologies is permitted as a method for providing an aural rendition of emergency information.⁴³⁶ Such emergency information must be accompanied by an aural tone both on the main program audio to alert viewers that emergency information is available, and on the secondary audio stream to differentiate the programming audio from emergency information audio.⁴³⁷ Emergency information provided aurally on the secondary audio stream must supersede all other programming on the secondary audio stream,⁴³⁸ and must be conveyed at least twice in full to ensure that consumers are able to hear all of the information after they switch from the main program audio to the secondary audio stream.⁴³⁹

110. Compliance with these new accessible emergency information rules is required by May 26, 2015,⁴⁴⁰ with the following exceptions: (1) The Weather Channel has a waiver for an additional six months beyond the general compliance deadline;⁴⁴¹ and (2) DIRECTV has a waiver for an additional 12

⁴³¹ *Emergency Information and Video Description NPRM*, 27 FCC Rcd at 14729, ¶ 1.

⁴³² *Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013) (*Emergency Information and Video Description Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf. See Section III.H of this Report, *infra* (discussing requirements for certain video programming apparatus to make emergency information and video description available).

⁴³³ *Emergency Information and Video Description Order and FNPRM*, 28 FCC Rcd at 4876-78, ¶ 7-8. However, in certain situations, the rules do apply to IP-delivered video programming provided by covered MVPDs, such as AT&T's provision of its U-verse service. *Id.*, 28 FCC Rcd at 4878, n.30.

⁴³⁴ *Id.*, 28 FCC Rcd at 4881, ¶ 12. Section 79.2 of the Commission's rules already require emergency information presented visually during a regularly scheduled newscast or a newscast that interrupts regular programming to be accessible to individuals who are blind or visually impaired. *Id.*, 28 FCC Rcd at 4879-80, ¶ 10; 47 C.F.R. § 79.2.

⁴³⁵ *Id.*, 28 FCC Rcd at 4890-91, ¶ 23. The information presented aurally must accurately and effectively communicate the critical details about and how to respond to the emergency to the same extent that this information is conveyed textually. *Id.*

⁴³⁶ *Id.*, 28 FCC Rcd at 4884, ¶ 16. If used, text-to-speech generated audio must be intelligible and must use the correct pronunciation of relevant information to allow consumers to learn about and respond to the emergency. *Id.*

⁴³⁷ *Id.*, 28 FCC Rcd at 4881, ¶ 12.

⁴³⁸ *Id.*, 28 FCC Rcd at 4892-94, ¶ 26.

⁴³⁹ *Id.*, 28 FCC Rcd at 4892, ¶ 25.

⁴⁴⁰ See 47 C.F.R. §§ 79.105(a), 79.106(a).

⁴⁴¹ *Emergency Information and Video Description Order and FNPRM*, 28 FCC Rcd at 4902-03, ¶¶ 39-40.

months beyond the general compliance deadline when local emergency information is provided visually during The Weather Channel's programming on DIRECTV systems, and a waiver of the requirements to provide aural emergency information on a secondary audio channel, to provide all of the critical details of an emergency, and to provide audio functionality on all set-top boxes.⁴⁴² Instead, the aural version of the emergency information that DIRECTV provides must capture the nature of the emergency to viewers whose set-top boxes are associated with zip codes in the affected area.⁴⁴³

111. The Commission accompanied its report and order adopting rules on accessible emergency information with a further notice of proposed rulemaking that sought additional comment on the following issues: (1) whether the new rules should apply to an MVPD that permits its subscribers to access linear video programming that contains emergency information on tablets, laptops, personal computers, smartphones, or similar devices; and (2) whether the FCC should require companies covered by the new rules to provide contact information and customer support services to help consumers who are blind or visually impaired navigate between the main and secondary audio streams.⁴⁴⁴

112. *Closed Captioning on Video Programming Delivered Using Internet Protocol.* Section 202(b) of the CVAA amends Section 713(c) of the Act to require the Commission to complete a proceeding, not later than six months after the first VPAAC report is submitted to the Commission, or by January 13, 2012, requiring the provision of closed captioning on video programming delivered using Internet protocol (IP).⁴⁴⁵

113. On January 12, 2012, the Commission adopted rules governing the closed captioning requirements for the owners, providers, and distributors of video programming delivered using IP.⁴⁴⁶ The rules established an implementation schedule with three deadlines for video programming that a distributor shows for the first time using IP (*i.e.*, video programming newly added to the distributor's online library): September 30, 2012 for pre-recorded programming that is not edited for Internet distribution; March 30, 2013 for live and near-live programming; and September 30, 2013 for pre-recorded programming that is substantially edited for Internet distribution.⁴⁴⁷ Separate deadlines apply to

⁴⁴² *Id.*, 28 FCC Rcd at 4903-05, ¶¶ 41-43.

⁴⁴³ *Id.*, 28 FCC Rcd at 4904-05, ¶ 43.

⁴⁴⁴ *Id.*, 28 FCC Rcd at 4926-27, 4929, ¶¶ 80, 86.

⁴⁴⁵ CVAA, § 202(a); 47 U.S.C. § 613(c)(2). The first VPAAC report was submitted to the Commission on July 13, 2011. See Section III.F of this *Report, supra*. Closed captioning is the visual display of the audio portion of video programming, which provides access to individuals who are deaf or hard of hearing. See 47 C.F.R. § 79.1(a)(4).

⁴⁴⁶ *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-154, Report and Order, FCC 12-9, 27 FCC Rcd 787 (2012) (*IP Closed Captioning Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-9A1.pdf; 47 C.F.R. § 79.4. As part of this proceeding, the Commission also adopted rules to implement the CVAA provision amending the requirements for closed captioning capabilities of certain apparatus on which consumers view video programming. See Section III.H of this *Report, infra*.

⁴⁴⁷ 47 U.S.C. § 613(c)(2)(B); 47 C.F.R. §§ 79.4(b)(1)-(3). See also *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Petitions for Temporary Partial Exemption or Limited Waiver*, MB Docket No. 11-154, Memorandum Opinion and Order, DA 12-1354, 27 FCC Rcd 9630 (MB 2012) (granting an extension until January 1, 2014 of the requirement in Section 79.4(c)(2)(i) of the Commission's rules that applications, plug-ins, or devices provided by video programming distributors and providers comply with the closed captioning display capabilities in

video programming that is already in a distributor's online library before it is shown on television with captions. Specifically, the distributor must add captions within 45 days after the video programming is shown on television with captions on or after March 30, 2014; the distributor must add captions within 30 days after the video programming is shown on television with captions on or after March 30, 2015; and the distributor must add captions within 15 days after the video programming is shown on television with captions on or after March 30, 2016.⁴⁴⁸ All deadlines apply only to video programming that was published or exhibited on television with captions after the effective date of the Commission's IP closed captioning regulations.⁴⁴⁹ Finally, the IP closed captioning rules establish a mechanism for petitioning the Commission for a full or partial exemption from the IP closed captioning requirements based on economic burden, and establish procedures for the filing and resolution of written complaints.⁴⁵⁰

114. Since the *2012 CVAA Biennial Report*, the Commission also has concluded that video clips must be closed captioned to be in compliance with the CVAA. The *IP Closed Captioning Order* had applied only to full-length programming (video programming that appears on television and is distributed to end users, substantially in its entirety, via IP); it did not apply to video clips (excerpts of full-length video programming).⁴⁵¹ On April 27, 2012, the Commission received a petition for reconsideration that urged it to require IP-delivered video clips to be captioned.⁴⁵² In particular, consumers expressed concern about the availability of captioned news clips, which tend to be live or near-live.⁴⁵³ Because full-length live and near-live programming had become subject to the IP closed captioning requirements only about a month before the petition was filed, in a June 2013 order, the Commission deferred action on the petition, noting its expectation that captioning of such video clips would increase.⁴⁵⁴ Nonetheless, the Commission directed the Media Bureau to seek updated information

Section 79.103(c) of the Commission's rules), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1354A1.pdf.

⁴⁴⁸ 47 U.S.C. § 613(c)(2)(B); 47 C.F.R. § 79.4(b)(4).

⁴⁴⁹ 47 U.S.C. § 613(c)(2).

⁴⁵⁰ 47 C.F.R. §§ 79.4(d) and (e).

⁴⁵¹ *IP Closed Captioning Order*, 27 FCC Rcd at 816-17, ¶¶ 44-45.

⁴⁵² Petition of Telecommunications for the Deaf and Hard of Hearing, Inc., National Association of the Deaf, Deaf and Hard of Hearing Consumer Advocacy Network, Association of Late-Deafened Adults, Hearing Loss Association of America, Cerebral Palsy and Deaf Organization, and the Technology Access Program at Gallaudet University for Reconsideration, MB Docket No. 11-154 (filed Apr. 27, 2012) (Consumer Groups Petition), available at <http://apps.fcc.gov/ecfs/document/view?id=7021914512>. The Commission sought comment on this petition. *Petitions for Reconsideration of Action in Rulemaking Proceeding*, Report No. 2951, Public Notice (rel. May 17, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-314131A1.pdf.

⁴⁵³ See Consumer Groups Petition at 14-15.

⁴⁵⁴ *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-154, Order on Reconsideration and Further Notice of Proposed Rulemaking, FCC 13-84, 28 FCC Rcd 8785, 8804, ¶ 30 (2013) (*Closed Captioning Order on Reconsideration and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-84A1.pdf.

on the availability of captioned video clips within six months,⁴⁵⁵ which the Media Bureau did on December 13, 2013.⁴⁵⁶

115. On July 11, 2014, the Commission reconsidered its earlier decision on video clips, and ruled that clips of video programming that has been shown on television with captions must be captioned when delivered using IP according to a new schedule of compliance deadlines.⁴⁵⁷ The rules adopted in that July 2014 order apply only to video clips of video programming that is published or exhibited on television in the United States with captions to the extent that a video programming provider or distributor posts such clips on its own website or application.⁴⁵⁸ The compliance deadlines for captioning video clips vary, depending upon the type of video clip. A “straight lift” clip, which contains a single excerpt of a captioned television program with the same video and audio that was shown on television, must be captioned by January 1, 2016.⁴⁵⁹ A “montage,” which is a single file containing multiple straight lift clips, must be captioned by January 1, 2017.⁴⁶⁰ The Commission concluded that it would be economically burdensome to require captioning and, therefore, exempted video clips that are in the video programming distributor’s or provider’s library before the relevant compliance deadline.⁴⁶¹ By July 1, 2017, video clips of live and near-live television programming, such as news or sporting events, must be captioned.⁴⁶² Clips of live and near-live programming may be posted online without captions, but captions must be added within a 12-hour or an eight-hour grace period, respectively, after the live or near-live programming has been shown on television.⁴⁶³

116. The Commission accompanied its *Video Clips Order* with a further notice of proposed rulemaking in which it sought comment on four related issues: (1) whether third party video programming providers and distributors should be required to caption video clips; (2) whether the grace periods for captioning clips of live and near-live video programming should be decreased or eliminated; (3) whether to require captioning on “mash-ups” (files that contain a combination of video clips that have been shown on television with captions and online-only content); and (4) whether the new rules should apply to “advance” video clips (clips that are put online before the video programming is shown on television with captions, and which then remain online after being shown on television).⁴⁶⁴

⁴⁵⁵ *Id.*

⁴⁵⁶ *Media Bureau Seeks Comment on Closed Captioning of Internet Clips*, MB Docket No. 11-154, Public Notice, DA 13-2392, 28 FCC Rcd 16699 (MB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-2392A1.pdf.

⁴⁵⁷ *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*, MB 11-154, Second Order on Reconsideration and Second Further Notice of Proposed Rulemaking, FCC 14-97, 29 FCC Rcd 8687 (2014) (*Video Clips Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-97A1.pdf.

⁴⁵⁸ *Video Clips Order*, 29 FCC Rcd at 8692-93, ¶ 9.

⁴⁵⁹ *Id.*

⁴⁶⁰ *Id.*

⁴⁶¹ *Id.*

⁴⁶² *Id.*

⁴⁶³ *Id.*

⁴⁶⁴ *Id.*, 29 FCC Rcd at 8712-19, ¶¶ 36-50.

117. *Exemptions Based on Economic Burden.* Section 202(c) of the CVAA amends Section 713(d) of the Act by replacing the term “undue burden” with the term “economically burdensome” as the standard by which the Commission is to assess requests for exemptions from the closed captioning requirements.⁴⁶⁵ As described further in the *2012 CVAA Biennial Report*,⁴⁶⁶ since July 20, 2012, the Commission has interpreted the term “economically burdensome” in Section 713(d)(3) using the same factors previously used to interpret the term “undue burden” as defined in Section 713(e) of the Act.⁴⁶⁷

H. Section 203. Closed Captioning Decoder and Video Description Capability

118. Section 203 of the CVAA amends the Act to update the closed captioning requirements for apparatus that receive, play back, or record video programming, and to establish new requirements for these apparatus with respect to the provision of video description and accessible emergency information, to ensure that these features and services reach viewers.⁴⁶⁸ Each of these requirements is addressed, in turn, in this section.

119. *Apparatus – Closed Captioning Requirements.* Section 203(a) of the CVAA amends Section 303(u) of the Act to require, if technically feasible, that apparatus designed to receive or play back video programming that uses a picture screen of any size be equipped with built-in closed caption decoder circuitry or the capability to display closed captioned video programming.⁴⁶⁹ Such apparatus that uses a picture screen that is less than 13 inches in size must meet these requirements only if doing so is achievable.⁴⁷⁰ Section 203(b) of the CVAA adds Section 303(z) to the Act to require that, if achievable, apparatus designed to record video programming be able to render or pass through closed captions, such that viewers are able to activate and de-activate the closed captions as the video programming is played back on a picture screen of any size.⁴⁷¹ This section of the CVAA also addresses requirements for interconnection mechanisms and standards for digital video source devices to permit or render the display of closed captions.⁴⁷²

⁴⁶⁵ CVAA, § 202(c), amending 47 U.S.C. § 613(d)(3). The CVAA also codified existing Commission policy that, during the pendency of an exemption petition, a provider or owner shall be exempt from having to provide closed captioning. *Id.* See also 47 C.F.R. § 79.1(f)(11). Congress also directed the Commission to act upon such an exemption petition within six months after receipt, unless the Commission finds that an extension of this period is necessary to determine whether the captioning requirements are economically burdensome. See CVAA, § 202(c), amending 47 U.S.C. § 613(d)(3).

⁴⁶⁶ *2012 CVAA Biennial Report*, 27 FCC Rcd at 12250-51, ¶ 114.

⁴⁶⁷ See *Interpretation of Economically Burdensome Standard; Amendment of Section 79.1(f) of the Commission’s Rules; Video Programming Accessibility*, CG Docket No. 11-175, Report and Order, FCC 12-83, 27 FCC Rcd 8831 (2012), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-83A1.pdf. See also 47 C.F.R. §§ 79.1(d)(2), 79.1(f)(1), (2), (3), (4), (10), and (11) (codifying the revised nomenclature).

⁴⁶⁸ CVAA, § 203.

⁴⁶⁹ CVAA, § 203(a), amending 47 U.S.C. § 303(u)(1)(A).

⁴⁷⁰ CVAA, § 203(a), amending 47 U.S.C. § 303(u)(2)(A). “Achievable” means “with reasonable effort or expense.” 47 U.S.C. § 617(g).

⁴⁷¹ CVAA, § 203(b), adding 47 U.S.C. § 303(z)(1).

⁴⁷² CVAA, § 203(b), adding 47 U.S.C. § 303(z)(2).

120. On January 12, 2012, the Commission adopted rules implementing these provisions in accordance with the CVAA.⁴⁷³ The rules apply to all physical devices designed to receive and play back video programming (e.g., televisions, set-top boxes, personal computers, tablets, and smartphones), all integrated software in those devices, and all recording devices and removable media players.⁴⁷⁴ Professional and commercial equipment, along with display-only monitors are excluded.⁴⁷⁵ Covered apparatus must render or pass through closed captioning on each of their video outputs and comply with functional display standards.⁴⁷⁶ Covered devices were required to comply with the new requirements by January 1, 2014.⁴⁷⁷

121. Since the *2012 CVAA Biennial Report*, the Commission addressed three petitions, all received in April 2012, for reconsideration of its *IP Closed Captioning Order*.⁴⁷⁸ Specifically, in response to these petitions, on June 14, 2013, the Commission affirmed, modified, and clarified prior rulings regarding its closed captioning requirements for IP-delivered video programming and apparatus used to view video programming, as follows:⁴⁷⁹

⁴⁷³ *Closed Captioning of Internet Protocol-Delivered Video Programming: -Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-154, Report and Order, FCC 12-9, 27 FCC Rcd 787 (2012) (*IP Closed Captioning Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-9A1.pdf. See also 47 C.F.R. §§ 79.103 and 79.104. In this proceeding, the Commission also adopted rules to implement the CVAA provision requiring closed captioning of video programming distributed using Internet protocol. See Section III.G of this *Report, supra*. Section 203(d)(1) had required the Commission to adopt these rules within six months after the first VPAAC report is submitted to the Commission, or by January 13, 2012. CVAA, § 203(d)(1). The first VPAAC report was submitted to the Commission on July 13, 2011. See Section III.F of this *Report, supra*.

⁴⁷⁴ *IP Closed Captioning Order*, 27 FCC Rcd at 790, ¶ 3. But see ¶ 120, *infra* (summarizing the Commission's response to the CEA petition for reconsideration).

⁴⁷⁵ *Id.*

⁴⁷⁶ *Id.*

⁴⁷⁷ *Id.*

⁴⁷⁸ Petition of Consumer Electronics Association for Reconsideration, MB Docket No. 11-154 (filed Apr. 30, 2012) (CEA Petition) (requesting that the Commission apply the closed captioning rules only to apparatus with "video programming" players, not to removable media players, and to clarify that the compliance deadline refers to date of manufacture), available at <http://apps.fcc.gov/ecfs/document/view?id=7021914799>; Petition of TVGuardian, LLC, for Reconsideration, MB Docket No. 11-154 (filed Apr. 16, 2012) (TVGuardian Petition) (asking the Commission to require video programming providers and distributors and digital video source devices to pass through the closed captions data to the consumer equipment, with the same quality, including timing, as received), available at <http://apps.fcc.gov/ecfs/document/view?id=7021910648>; Petition of Telecommunications for the Deaf and Hard of Hearing, Inc., National Association of the Deaf, Deaf and Hard of Hearing Consumer Advocacy Network, Association of Late-Deafened Adults, Hearing Loss Association of America, Cerebral Palsy and Deaf Organization, and the Technology Access Program at Gallaudet University for Reconsideration, MB Docket No. 11-154 (filed Apr. 27, 2012) (Consumer Groups Petition) (urging the Commission to impose synchronization requirements on device manufacturers), available at <http://apps.fcc.gov/ecfs/document/view?id=7021914512>. The Commission sought comments on each of these petitions. *Petitions for Reconsideration of Action in Rulemaking Proceeding*, MB Docket No. 11-154, Public Notice, Report No. 2951 (rel. May 17, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-314131A1.pdf.

⁴⁷⁹ *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 11-154, Order on Reconsideration and Further Notice of Proposed Rulemaking, FCC 13-84, 28 FCC Rcd 8785 (2013) (*Closed Captioning Order on Reconsideration and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-84A1.pdf.

- *CEA Petition.* The Commission denied a request by CEA to narrow the scope of its rules; instead, the Commission affirmed that the phrase “designed to receive and play back video programming” turns on the capabilities of the apparatus rather than the manufacturer’s intent.⁴⁸⁰ Also without narrowing the scope of its rules, the Commission revised the note to Section 79.103(a) of its rules to replace references to “video players” with “video player(s) capable of displaying video programming transmitted simultaneously with sound.”⁴⁸¹ The Commission also granted narrow class waivers for certain apparatus that are primarily designed for activities other than receiving or playing back video programming.⁴⁸² In addition, the Commission denied CEA’s request for a ruling excluding removable media players from the closed captioning requirements but, at the same time, temporarily extended the compliance deadlines for Blu-ray players as well as for those DVD players that do not currently render or pass through captions.⁴⁸³ Additionally, the Commission granted CEA’s request to modify the January 1, 2014 deadline by which apparatus would have to be accessible, to refer only to the date of manufacture, and not to the date of importation, shipment, or sale.⁴⁸⁴
- *TVGuardian Petition.* The Commission denied TVGuardian’s request that the Commission reconsider its decision to allow video programming providers and distributors to enable the rendering *or* pass through of captions to end users.⁴⁸⁵ TV Guardian had wanted the Commission to instead require video programming providers and distributors, and digital source devices, to pass through closed captioning data to consumer equipment.⁴⁸⁶
- *Consumer Groups Petition.* The Commission deferred resolution of a request from various consumer groups to impose synchronization requirements on device manufacturers until further information is available on this issue.⁴⁸⁷

122. *Apparatus – Video Description and Emergency Information Requirements.* Section 203(a), which amends Section 303(u) of the Act, requires, if technically feasible, apparatus designed to receive or play back video programming that uses a picture screen of any size to have the capability to decode and make available the transmission and delivery of required video description services; and to

⁴⁸⁰ *Id.*, 28 FCC Rcd at 8788-89, ¶¶ 5-7.

⁴⁸¹ *Id.*, 28 FCC Rcd at 8789-90, ¶¶ 8-10. *See also* note to 47 C.F.R. § 79.103(a).

⁴⁸² *Closed Captioning Order on Reconsideration and FNPRM*, 28 FCC Rcd at 8790-93, ¶¶ 11-15. The classes of apparatus waived include devices that are primarily designed to capture and display still and/or consumer generated media (*e.g.*, digital still cameras, digital video cameras, baby monitors, security cameras, as well as microscopes, binoculars, and probes that act in combination with a digital video camera); and devices that are primarily designed to display still images (*e.g.*, digital picture frames). *Id.*

⁴⁸³ *Id.*, 28 FCC Rcd at 8793-98, ¶¶ 16-22. Determination of a compliance deadline is pending resolution of related issues. *Id.*, 28 FCC Rcd at 8806-08, ¶¶ 35-37.

⁴⁸⁴ *Id.*, 28 FCC Rcd at 8798-99, ¶¶ 23-25.

⁴⁸⁵ *Id.*, 28 FCC Rcd at 8799-8803, ¶¶ 26-29.

⁴⁸⁶ *Id.*, 28 FCC Rcd at 8780, ¶ 27.

⁴⁸⁷ *Id.*, 28 FCC Rcd at 8805-06, ¶¶ 31, 32-34. In this proceeding, the Commission also deferred resolution of whether to reconsider the Commission’s decision to exclude video clips from the scope of the IP closed captioning rules. *Id.*, 28 FCC Rcd at 8803-04, ¶ 30. *See also* Section III.G in this *Report, supra*.

have the capability to decode and make available emergency information in a manner that is accessible to individuals who are blind or visually impaired.⁴⁸⁸ Such apparatus that uses a picture screen that is less than 13 inches in size must meet these requirements only if they are achievable.⁴⁸⁹ Section 203(b) of the CVAA, which adds Section 303(z) to the Act, requires that, if achievable, apparatus designed to record video programming must enable the rendering or the pass through of video description signals and emergency information, such that viewers are able to activate and de-activate those functions as the video programming is played back on a picture screen of any size.⁴⁹⁰ This section of the CVAA also addresses requirements for interconnection mechanisms and standards for digital video source devices.⁴⁹¹ Section 203(d)(2) requires the Commission to adopt implementing regulations for these provisions within 18 months after the second VPAAC report is submitted to the Commission, or by October 9, 2013.⁴⁹²

123. Since the *2012 CVAA Biennial Report*, in November 2012, the Commission proposed rules to implement these apparatus requirements with respect to video description and accessible emergency information.⁴⁹³ On April 8, 2013, six months in advance of the CVAA deadline, the Commission adopted rules requiring that certain video programming apparatus be capable of delivering video description and accessible emergency information to individuals who are blind or visually impaired.⁴⁹⁴ The new rules apply to apparatus designed to receive or play back video programming and require the capability to decode and make available the secondary audio stream to facilitate the transmission and delivery of video description and accessible emergency information as defined by the Commission's rules.⁴⁹⁵ The new rules also apply to apparatus designed to record video programming and require those devices to store the secondary audio stream so that consumers can switch between the main

⁴⁸⁸ CVAA, § 203(a), amending 47 U.S.C. §§ 303(u)(1)(B) and (C).

⁴⁸⁹ CVAA, § 203(a), amending 47 U.S.C. § 303(u)(2)(A).

⁴⁹⁰ CVAA, § 203(b), adding 47 U.S.C. § 303(z)(1).

⁴⁹¹ CVAA, § 203(b), adding 47 U.S.C. § 303(z)(2).

⁴⁹² CVAA, § 203(d)(2). The second VPAAC report was submitted to the Commission on April 9, 2012. See Section III.F of this *Report, supra*.

⁴⁹³ *Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket No. 12-107, Notice of Proposed Rulemaking, FCC 12-142, 27 FCC Rcd 14728, 14741-49, ¶¶ 19-37 (2012) (*Emergency Information and Video Description NPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-142A1.pdf. This rulemaking proceeding was informed by comments received about the VPAAC's second report. See n.404, *supra*. See also Section III.F of this *Report, supra*. In this proceeding, the Commission also sought comment on the implementation of CVAA requirements for televised emergency information to be accessible to individuals who are blind or visually impaired. See Section III.G of this *Report, supra*.

⁴⁹⁴ *Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013) (*Emergency Information and Video Description Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf. See Section III.G of this *Report, supra* (discussing requirements for televised emergency information to be accessible to individuals who are blind or visually impaired).

⁴⁹⁵ *Emergency Information and Video Description Order and FNPRM*, 28 FCC Rcd at 4907, 4913-16, ¶¶ 49, 60-62. See also 47 C.F.R. §§ 79.2 (emergency information accessibility rules), 79.3 (video description rules).

program audio and the secondary audio stream when viewing recorded video programming.⁴⁹⁶ The Commission's new rules also codified the requirement for devices to use interconnection mechanisms that make available audio provided via a secondary audio stream.⁴⁹⁷ Professional and commercial equipment, along with display-only monitors are excluded.⁴⁹⁸ The Commission noted that most covered apparatus already make secondary audio streams available today.⁴⁹⁹ Covered devices that do not yet comply with these requirements must comply by May 26, 2015.⁵⁰⁰

124. In a further notice of proposed rulemaking accompanying the *Emergency Information and Video Description Order*, the Commission sought further comment on the following issues: (1) whether additional time would be needed for MVPDs and/or manufacturers if they were required to make a secondary audio stream available for linear video programming services provided via tablets, laptops, personal computers, smartphones, or similar devices; (2) whether to require tagging or labeling of content on the secondary audio stream to help consumers locate the stream when desired content is present; and (3) whether the FCC should require companies covered by the new rules to provide contact information and customer support services to help consumers who are blind or visually impaired navigate between the main and secondary audio streams.⁵⁰¹ In addition, in a further notice of proposed rulemaking accompanying an unrelated CVAA proceeding – which established requirements for accessible user interfaces and programming guides and menus provided by navigation devices⁵⁰² – the Commission sought public comment on whether manufacturers of apparatus covered by Section 203 of the CVAA should be required to provide access to the secondary audio stream used for audible emergency information by a mechanism reasonably comparable to a button, key, or icon.⁵⁰³ Both of these proceedings are pending before the Commission.⁵⁰⁴

I. Section 204. User Interfaces on Digital Apparatus

125. Section 204 of the CVAA establishes accessibility requirements for user interfaces on digital apparatus designed to receive or play back video programming, including video programming

⁴⁹⁶ *Emergency Information and Video Description Order and FNPRM*, 28 FCC Rcd at 4909, 4913-16, ¶¶ 52, 60-62.

⁴⁹⁷ *Id.*, 28 FCC Rcd at 4911, ¶ 55.

⁴⁹⁸ *Id.*, 28 FCC Rcd at 4921-22, ¶¶ 72-73.

⁴⁹⁹ *Id.*, 28 FCC Rcd at 4906-07, ¶ 48.

⁵⁰⁰ See 47 C.F.R. §§ 79.105(a), 79.106(a). The Commission, however, granted DIRECTV a waiver with respect to the set-top box models on which it is unable to implement audio functionality for emergency information, conditioned on the requirement that it provide, upon request and at no additional cost to customers who are blind or visually impaired, a set-top box model that is capable of providing aural emergency information. *Id.*, 28 FCC Rcd at 4905, ¶ 44.

⁵⁰¹ *Id.*, 28 FCC Rcd at 4926-27, 4928-29, ¶¶ 80-82, 85-86.

⁵⁰² *Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013) (*User Interfaces, Programming Guides and Menus Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf. See also Sections III.I and K of this Report, *infra*.

⁵⁰³ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17417-18, ¶¶ 145-147.

⁵⁰⁴ *Id.*

transmitted in digital format using IP.⁵⁰⁵ The term “apparatus” does not include a navigation device.⁵⁰⁶ Section 204(a) adds Section 303(aa) to the Act to require, if achievable, that such apparatus be designed, developed, and fabricated so that control of appropriate built-in apparatus functions are accessible to and usable by individuals who are blind or visually impaired, including real-time audio output for on-screen text menus or other visual indicators used to access those functions.⁵⁰⁷ This section also mandates access to closed captioning and video description features through the use of a mechanism that is reasonably comparable to a button, key, or icon designated for activating such features.⁵⁰⁸

126. Since the *2012 CVAA Biennial Report*, in May 2013, the Commission proposed rules to implement these accessibility requirements for apparatus used to view video programming.⁵⁰⁹ On October 29, 2013, the Commission adopted rules to implement these requirements, in accordance with the CVAA.⁵¹⁰

127. The Commission identified the appropriate built-in functions of digital apparatus that must be accessible to individuals who are blind or visually impaired as the 11 essential functions identified by the VPAAC used for the reception, play back, or display of video programming.⁵¹¹ On-screen text menus or other visual indicators used to access these built-in functions must be accompanied by audio output.⁵¹² The Commission also provided guidance on the meaning of “reasonably comparable

⁵⁰⁵ CVAA, § 204.

⁵⁰⁶ 47 U.S.C. § 303(aa)(4). See Section III.J of this *Report, infra* (summarizing accessibility requirements for navigation devices).

⁵⁰⁷ CVAA, § 204(a); 47 U.S.C. §§ 303(aa)(1) and (2).

⁵⁰⁸ 47 U.S.C. § 303(aa)(3).

⁵⁰⁹ *Accessibility of User Interfaces, and Video Programming Guides and Menus*, MB Docket No. 12-108, Notice of Proposed Rulemaking, FCC 13-77, 28 FCC Rcd 8506, (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-77A1.pdf. This rulemaking proceeding was informed by comments received about the VPAAC’s second report. See n.404, *supra*. See also Section III.F of this *Report, supra*. In this proceeding, the Commission also sought comment on the implementation of CVAA accessibility requirements for navigation devices. See Section III.J of this *Report, infra*.

⁵¹⁰ *Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013) (*User Interfaces, Programming Guides and Menus Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf. In this proceeding, the Commission also adopted rules implementing CVAA accessibility requirements for navigation devices. See Section III.J of this *Report, infra*. The new rules also include procedures for the filing of consumer complaints. *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17405-06, ¶ 120. Section 204(b) had required the Commission to adopt implementing regulations for these provisions within 18 months after the second VPAAC report was submitted to the Commission. CVAA, § 204(b). The second VPAAC report was submitted to the Commission on April 9, 2012. See Section III.F of this *Report, supra*. The October 9, 2013 deadline for the Commission to prescribe regulations to implement Section 204 of the CVAA occurred during a shutdown of the federal government due to a lapse in appropriations, when the Commission could not conduct normal business operations. CVAA, § 204(b). The Commission adopted rules to implement Section 204 of the CVAA within two weeks after the government re-opened.

⁵¹¹ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17363, 17366-68, ¶¶ 54, 58. See also Section III.F in this *Report, supra* (describing the VPAAC and its reports).

⁵¹² *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17371, ¶ 63.

to a button, key, or icon” and determined that covered apparatus must include such a mechanism for activating closed captioning and video description, but not for other accessibility features.⁵¹³

128. Compliance with the new rules for accessible user interfaces is required for covered digital apparatus manufactured on or after December 20, 2016.⁵¹⁴ The new rules apply to digital apparatus designed to receive or play back video programming, including video programming transmitted in digital format using IP, but not navigation devices.⁵¹⁵ Covered devices include televisions and personal computers *without* CableCARD or other conditional access technology, mobile devices (*e.g.*, tablets and smartphones) *without* MVPD applications preinstalled by the manufactures, and removable media players.⁵¹⁶ The rules do not apply to professional and commercial equipment, public safety and enterprise equipment, or general purpose broadband equipment, such as routers.⁵¹⁷ Although the rules apply to display-only monitors and video projectors, the Commission deferred compliance for these devices for an additional five years.⁵¹⁸ The Commission also deferred compliance for an additional five years for the devices that received waivers from the apparatus closed captioning requirements.⁵¹⁹

129. In a further notice of proposed rulemaking accompanying the *User Interfaces, Programming Guides and Menus Order*, the Commission sought further comment on the following: (1) how to define “usable” for purposes of requiring that certain built-in functions of covered apparatus “be accessible to and usable” by individuals who are blind or visually impaired as required by the CVAA; (2) whether to impose information, documentation, and training requirements; (3) whether to require a mechanism to enable consumers to locate and control closed captioning display settings; and (4) whether to impose notification requirements on equipment manufacturers that are subject to Section 204 of the CVAA.⁵²⁰

130. On January 20, 2014, Consumer Groups requested that the Commission reconsider the guidance it provided on the meaning of “reasonably comparable to a button, key, or icon” with respect to whether voice commands and gestures are compliant mechanisms for activating the closed captioning or accessibility feature.⁵²¹ On February 6, 2014, the Commission established a pleading cycle for oppositions and replies.⁵²² This matter remains pending.

⁵¹³ *Id.*, 28 FCC Rcd at 17381-84, 17385, ¶¶ 81-83, 84, 86.

⁵¹⁴ *Id.*, 28 FCC Rcd at 17399, ¶ 111. *See also* 47 C.F.R. § 79.107(b).

⁵¹⁵ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17348-49, ¶ 28. *See* Section III.J of this *Report, infra* (summarizing accessibility requirements for navigation devices).

⁵¹⁶ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17348-49 ¶ 28. The rules also apply to video players that manufacturers embed in their devices, as well as third-party video players that manufacturers install in their devices before sale or that they direct consumers to add to the device after sale to enable the device to play video. *Id.*, 28 FCC Rcd at 17353-54, ¶ 39. Video programming applications that are installed by the manufacturer (or those that the manufacturer directs consumers to install), such as Netflix, Hulu, and Amazon, must also be made accessible under Section 204 of the CVAA. *Id.*, 28 FCC Rcd at 17348, n.86.

⁵¹⁷ *Id.*, 28 FCC Rcd at 17349-50, ¶¶ 30-32.

⁵¹⁸ *Id.*, 28 FCC Rcd at 17351, ¶ 34.

⁵¹⁹ *Id.*, 28 FCC Rcd at 17352-53, ¶ 37. *See also* Section III.H of this *Report, supra*, ¶ 121, n.482.

⁵²⁰ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17413-17, 17420, ¶¶ 138-143, 152.

⁵²¹ Petition for Reconsideration of National Association of the Deaf, Telecommunications for the Deaf and Hard of Hearing, Inc. Deaf and Hard of Hearing Consumer Advocacy Network, Association of Late-Deafened Adults, Inc.

J. Section 205. Access to Video Programming Guides and Menus Provided on Navigation Devices

131. Section 205 of the CVAA establishes accessibility requirements for navigation devices.⁵²³ The term “navigation device” is defined in section 76.1200 of the Commission’s rules.⁵²⁴ Section 205(a) adds Section 303(bb) to the Act to require, if achievable, on-screen text menus and guides provided by navigation devices for the display or selection of multichannel video programming to be audibly accessible in real-time upon request by individuals who are blind or visually impaired.⁵²⁵ This section also mandates access to any built-in closed captioning capability through the use of a mechanism that is “reasonably comparable to a button, key, or icon designated for activating the closed captioning, or accessibility features.”⁵²⁶

132. Since the *2012 CVAA Biennial Report*, in May 2013, the Commission proposed rules to implement these accessibility requirements for navigation devices.⁵²⁷ On October 29, 2013, the Commission adopted rules to implement these requirements.⁵²⁸

Hearing Loss Association of America, California Coalition of Agencies Serving the Deaf and Hard of Hearing, Cerebral Palsy and Deaf Organization, and Technology Access Program Gallaudet University (Consumer Groups), MB Docket Nos. 12-108 and 12-107, filed January 20, 2014, available at <http://apps.fcc.gov/ecfs/document/view?id=7521066871>.

⁵²² *Pleading Cycle Established for Oppositions and Replies to the Petition for Reconsideration of the User Interfaces Order*, MB Docket Nos. 12-107 and 12-108, Public Notice, DA 14-159, 29 FCC Rcd 1192 (MB 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-159A1.pdf.

⁵²³ CVAA, § 205.

⁵²⁴ 47 U.S.C. § 303(bb)(1); 47 C.F.R. § 76.1200.

⁵²⁵ CVAA, § 205(a); 47 U.S.C. § 303(bb)(1).

⁵²⁶ 47 U.S.C. § 303(bb)(2).

⁵²⁷ *Accessibility of User Interfaces, and Video Programming Guides and Menus*, MB Docket No. 12-108, Notice of Proposed Rulemaking, FCC 13-77, 28 FCC Rcd 8506 (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-77A1.pdf. This rulemaking proceeding was informed by comments received about the VPAAC’s second report. See n.404, *supra*. See also Section III.F of this *Report, supra*. In this proceeding, the Commission also sought comment on the implementation of CVAA accessibility requirements for apparatus used to view video programming. See Section III.I of this *Report, supra*.

⁵²⁸ *Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013) (*User Interfaces, Programming Guides and Menus Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf. In this proceeding, the Commission also adopted rules implementing CVAA accessibility requirements for apparatus user interfaces. See Section III.I of this *Report, supra*. The new rules also include procedures for the filing of consumer complaints. *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17405-06, ¶ 120. Section 205(b)(1) required the Commission to adopt implementing regulations for these provisions within 18 months after the second VPAAC report is submitted to the Commission. CVAA, § 205(b)(1). The second VPAAC report was submitted to the Commission on April 9, 2012. See Section III.F of this *Report, supra*. The October 9, 2013 deadline for the Commission to prescribe regulations to implement Section 205 of the CVAA occurred during a shutdown of the federal government due to a lapse in appropriations, when the Commission could not conduct normal business

133. The Commission interpreted the term “navigation device” to encompass devices that have built-in capability to use a conditional access mechanism in to access MVPD video programming and other services.⁵²⁹ Navigation devices include the following: 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; cable modems; and third-party devices with MVPD applications that are installed by the device manufacturers.⁵³⁰ The rules apply to MVPDs leasing or selling navigation devices to their subscribers, equipment manufacturers placing navigation devices (*e.g.*, TiVo boxes) into the chain of commerce for purchase by consumers, and other manufacturers of navigation device hardware and software.⁵³¹ The rules do not apply to professional and commercial equipment, public safety and enterprise equipment, or general purpose broadband equipment, such as routers.⁵³²

134. Covered entities must ensure that the on-screen text menus and guides provided by their navigation devices for the display or selection of multichannel video programming are audibly accessible, if achievable.⁵³³ The Commission determined that nine of the 11 functions identified by the VPAAC must be made audibly accessible, and that the other two functions (“Power On/Off” and “Volume Adjust and Mute”) must be made accessible because they are necessary to access covered functions, but they need not be made audibly accessible.⁵³⁴ The Commission provided guidance with respect to the meaning of “reasonably comparable to a button, key, or icon” and determined that all covered navigation devices with built-in closed captioning capability must include such a mechanism for activating closed captioning, but not for video description or other accessibility features.⁵³⁵

135. When the covered entity is an MVPD that leases or sells navigation devices to subscribers, the obligation to provide compliant navigation devices “upon request” requires the following: subscribers who are blind or visually impaired may request compliant navigation devices through any means made available generally to other subscribers requesting navigation devices; and the MVPD will provide accessibility within a reasonable time and in a manner that is not more burdensome than is required for consumers generally to obtain navigation devices.⁵³⁶ When the covered entity is a manufacturer, the obligation to provide compliance navigation devices “upon request” may be satisfied by offering such devices through the same means that it generally uses to provide navigation devices to other

operations. CVAA, § 205(b)(1). The Commission adopted rules to implement Section 205 of the CVAA within two weeks after the government re-opened.

⁵²⁹ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17337, ¶ 12.

⁵³⁰ *Id.*, 28 FCC Rcd at 17344-46, ¶ 23.

⁵³¹ *Id.*, 28 FCC Rcd at 17355-56, ¶ 43.

⁵³² *Id.*, 28 FCC Rcd at 17349-50, ¶¶ 30-32.

⁵³³ *Id.*, 28 FCC Rcd at 17371-72, ¶ 64

⁵³⁴ *Id.*, 28 FCC Rcd at 17371-72, 17373-74, 71376, ¶¶ 64, 68, 72. See also Section III.F in this *Report, supra* (describing the VPAAC and its reports).

⁵³⁵ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17381-85, 17395, ¶¶ 81-83, 85-86, 104.

⁵³⁶ *Id.*, 28 FCC Rcd at 17385-86, ¶ 87. In certain limited circumstances, an MVPD may require verification that the consumer is blind or visually impaired. *Id.*, 28 FCC Rcd at 17409-11, ¶ 132.

consumers (e.g., through retail outlets or direct sales).⁵³⁷ Covered entities that choose to comply with these accessibility requirements through the use of a separate solution must provide such solution to the requesting individual who is blind or visually impaired within a reasonable time, at no additional charge, and in a manner that is not more burdensome than the manner in which it generally provides navigation devices to other consumers.⁵³⁸

136. Compliance with the new accessibility rules is required for covered MVPDs and manufacturers for navigation devices manufactured on or after December 20, 2016.⁵³⁹ The Commission delayed compliance for mid-sized and smaller MVPD operators and systems until December 20, 2018.⁵⁴⁰

137. In a further notice of proposed rulemaking accompanying the *User Interfaces, Programming Guides and Menus Order*, the Commission sought further comment on the following: (1) imposing information, documentation, and training requirements; (2) requiring a mechanism to enable consumers to locate and control closed captioning display settings; (3) requiring MVPDs to provide information about programs on public, educational, and governmental (PEG) channels in their video programming guides and menus; (4) imposing additional notification requirements on MVPDs; and (5) imposing notification requirements on navigation device manufacturers.⁵⁴¹

K. Other Accessibility-Related Commission Activities

138. In addition to implementation of the CVAA, since the *2012 CVAA Biennial Report*, the Commission has continued to engage in various activities designed to expand the accessibility of new communications technologies. These activities are described below.

139. *Accessibility and Innovation Initiative* (A&I Initiative). The Commission's A&I Initiative promotes collaborative problem-solving among industry, consumers, and government stakeholders so that people with disabilities are able to reap the full benefit of broadband communication technologies.⁵⁴² The Commission launched the A&I Initiative on July 19, 2010, during activities commemorating the 20th anniversary of the Americans with Disabilities Act (ADA). The A&I Initiative seeks greater involvement from the public in identifying and solving accessibility barriers, and uses new media technologies to facilitate transparent ways of sharing information with the public and working together to develop innovative accessibility solutions. Some of the activities in which the A&I Initiative has engaged since the *2012 CVAA Biennial Report* include the following:

- Chairman's Awards for Advancements in Accessibility. Since 2011, the Commission has recognized outstanding private and public sector ventures that advance communication and

⁵³⁷ *Id.*, 28 FCC Rcd at 17385-86, ¶ 87. A manufacturer relying on retailers to fulfill requests from consumers who are blind or visually impaired must make a good faith effort to have such retailers make available compliant navigation devices to the same extent they make available navigation devices to other consumers generally. *Id.*

⁵³⁸ *Id.*, 28 FCC Rcd at 17389-90, ¶ 94.

⁵³⁹ *Id.*, 28 FCC Rcd at 17399, ¶ 111. See also 47 C.F.R. § 79.108(b).

⁵⁴⁰ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17401, ¶ 114. See also 47 C.F.R. §§ 79.108(b)(1), (2).

⁵⁴¹ *User Interfaces, Programming Guides and Menus Order and FNPRM*, 28 FCC Rcd at 17414-17, 14719-20, ¶ 139-144, 148-151. See also Section III.H in this Report, *supra*.

⁵⁴² See <http://www.broadband.gov/accessibilityandinnovation/>.

video programming access for people with disabilities with “Awards for Advancement in Accessibility” (Chairman’s AAA). These awards are presented for the development of individual mainstream or assistive technologies introduced into the marketplace, the development of standards, or the implementation of best practices that foster accessibility. The first set of awards was given to deserving recipients in October 2011. Since the *2012 CVAA Biennial Report*, two additional sets of awards were distributed as follows:

On November 26, 2012, FCC Chairman Julius Genachowski presented awards to six innovations designed to advance accessibility for persons with disabilities in the categories of consumer empowerment/ information, mobile applications, civic participation, education, video programming, and geo-location. In addition, Chairman Genachowski awarded two honorable mentions to entities for innovations related to video chat communication and touchscreen access to Braille on mobile devices.

On June 9, 2014, FCC Chairman Tom Wheeler presented awards at the 2014 M-Enabling Summit in Arlington, Virginia.⁵⁴³ These honorary awards were given for seven innovations designed to advance accessibility for persons with disabilities in the categories of advanced communications services, closed captions, employment opportunities, intellectual and developmental disabilities, mobile web browsers, social media, and video description.⁵⁴⁴

- Accessing Social Media. The A&I Initiative hosted a public event, “Accessing Social Media,” on Thursday, July 17, 2014 at the FCC.⁵⁴⁵ The event included panels of industry, consumer, and government representatives to facilitate a collaborative, cross-sector exchange of information about making social media tools and content accessible to people with disabilities, including information about authoring tools, client apps, and best practices.⁵⁴⁶
- Speaker Series. The A&I Initiative launched its speaker series in 2013 to raise awareness and encourage innovation in accessible communications technologies that can benefit people with disabilities. Presentations included: Clayton Lewis on “The Future of Inclusive Design Online” (July 16, 2013);⁵⁴⁷ Yevgen Borodin on “Improving Accessibility for the General Public” (September 12, 2013),⁵⁴⁸ and Juan Gilbert on “Innovation in Voting Accessibility” (March 11, 2014).⁵⁴⁹

⁵⁴³ See ¶ 140, *infra* (discussing the M-Enabling Summit).

⁵⁴⁴ *FCC Chairman Wheeler Honors Innovators in Accessibility Communications Technology with Annual Awards*, Press Release (Jun. 9, 2014), available at <http://www.fcc.gov/document/chairman-wheeler-honors-innovators-accessibility>.

⁵⁴⁵ The event was webcast and is available at <http://www.fcc.gov/events/accessing-social-media>.

⁵⁴⁶ See *FCC Event: Accessing Social Media*, <http://www.fcc.gov/events/accessing-social-media>.

⁵⁴⁷ This event was webcast and is available at <http://www.fcc.gov/events/accessibility-innovation-initiative-speaker-series-presents-clayton-lewis-future-inclusive-de>.

⁵⁴⁸ This event was webcast and is available at <http://www.fcc.gov/events/accessibility-innovation-initiative-speaker-series-presents-yevgen-borodin-improving-accessib>.

⁵⁴⁹ This event was webcast and is available at <http://www.fcc.gov/events/accessibility-innovation-initiative-speaker-series-presents-dr-juan-e-gilbert-innovation-voti>.

140. *M-Enabling Summit*. In 2013 and 2014, the Commission continued to work in cooperation with the Global Initiative for Inclusive Information and Communication Technologies (G3ict),⁵⁵⁰ to promote accessible mobile technology for senior citizens and users of all abilities.⁵⁵¹ On June 6 and 7, 2013, the M-Enabling Summit was held in Arlington, Virginia. In attendance were 430 participants representing 27 countries. On June 5, 2013, the Commission hosted a pre-conference briefing day for international delegates in Washington, DC, that focused on CVAA rulemaking and implementation to date. Featured speakers at the 2013 M-Enabling Summit included the following: FCC Acting Chairwoman Mignon Clyburn; Dan Hesse, CEO of Sprint; Steve Largent, President and CEO of CTIA – The Wireless Association; and international leaders from the communications industry and the disability community. On June 9 and 10, 2014, the M-Enabling Summit was held again in Arlington, Virginia. In attendance were 510 participants representing 19 countries. Featured speakers included the following: The Honorable Tom Harkin, U.S. Senator; FCC Chairman Tom Wheeler; Meredith Attwell Baker, incoming President and CEO of CTIA – The Wireless Association; and international leaders from the communications industry and the disability community. On June 11, 2014, the Commission and G3ict held an international policy briefing in Washington, DC, to share U.S. and international experiences on promoting accessibility and serving individuals with disabilities.

FEDERAL COMMUNICATIONS COMMISSION

Kris Anne Monteith
Acting Chief
Consumer and Governmental Affairs Bureau

⁵⁵⁰ The G3ict is a public-private partnership dedicated to facilitating the international implementation of the Digital Accessibility Agenda defined by the Convention on the Rights of Persons with Disabilities. See <http://g3ict.org/> (last viewed Sept. 10, 2014).

⁵⁵¹ The Commission first partnered with G3ict in 2011. See *2012 CVAA Biennial Report*, 27 FCC Rcd at 12256, ¶ 126.

APPENDIX A

List of Commenters

(CG Docket No. 10-213)

This is a list of parties who filed comments in the following proceedings. The complete record in this proceeding is available in the Commission's Electronic Comment Filing System located at <http://www.fcc.gov/cgb/ecfs/>.

Assessment

Consumer and Governmental Affairs Bureau Seeks Comment on the Accessibility of Communications Technologies for the 2014 Biennial Report under the Twenty-First Century Communications and Video Accessibility Act, CG Docket No. 10-213, Public Notice, DA 14-828, 29 FCC Rcd 7316 (CGB 2014) (2014 CVAA Assessment PN), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-828A1.pdf.

<u>Abbreviation</u>	<u>Commenter</u>	<u>Date</u>
AADB	American Association of the Deaf-Blind	July 15, 2014
ACB	American Council of the Blind	August 4, 2014
CEA	Consumer Electronics Association	July 15, 2014
CTIA	CTIA-The Wireless Association	July 14, 2014
Consumer Groups	National Association of the Deaf; Telecommunications for the Deaf and Hard of Hearing, Inc.; Deaf and Hard of Hearing Consumer Advocacy Network; Association of Late-Deafened Adults, Inc.; Hearing Loss Association of America; California Coalition of Agencies Serving the Deaf and Hard of Hearing; Cerebral Palsy and Deaf Organization; and Telecommunication-RERC (Technology Access Program at Gallaudet University and Trace Center at the University of Wisconsin-Madison)	August 4, 2014
Microsoft	Microsoft, Inc.	July 15, 2014
TIA	Telecommunications Industry Association	July 15, 2014
	Individuals:	
	Larry McMillan	August 7, 2014
	Vanessa Gonzalez	August 7, 2014
	Kevin Lee	August 7, 2014
	Karen Kacen	August 7, 2014
	Ronald Kaplan	August 7, 2014

Percy Chavez	August 7, 2014
Paul Salois	August 7, 2014
Russ Zochowski	August 7, 2014
Fred Scott	August 7, 2014
Andrea Roth	August 7, 2014
Rhonda Staats	August 7, 2014
Karen Palau	August 7, 2014
Anne Jarry	August 7, 2014
Donna Brown	August 7, 2014
Sandy Spalletta	August 7, 2014
Jeanette Schmoyer	August 7, 2014
Toni Fraser	August 7, 2014
David Goldstein	August 8, 2014
Al Posner	August 8, 2014
Jake Joehl	August 8, 2014
Rick Alfaro	August 8, 2014
Michael Levy	August 12, 2014
Katie Frederick	August 12, 2014
Ronald Flormata	August 12, 2014
Olivia Chavez	August 12, 2014

Tentative Findings

Consumer and Governmental Affairs Bureau Seeks Comment on its Tentative Findings about the Accessibility of Communications Technologies for the 2014 Biennial Report under the Twenty-First Century Communications and Video Accessibility Act, CG Docket No. 10-213, Public Notice, DA 14-1255, 29 FCC Rcd ___ (CGB 2014) (2014 CVAA Tentative Findings PN), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1255A1.pdf.

<u>Abbreviation</u>	<u>Commenter</u>	<u>Date</u>
ACB	American Council of the Blind	September 11, 2014
AFB	American Federation for the Blind	September 11, 2014
CTIA	CTIA-The Wireless Association	September 11, 2014
IT	Inclusive Technologies	September 10, 2014
Wireless RERC	Georgia Institute of Technology, Center for Advanced Communications Policy (CACP), and the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC)	September 11, 2014

APPENDIX B

**Commission Actions to Implement the CVAA⁵⁵²
Since October 5, 2012****Section 102. Hearing Aid Compatibility**

Request for Comment on Petition for Rulemaking Filed by the Telecommunications Industry Association Regarding Hearing Aid Compatibility Volume Control Requirements, CG Docket No. 13-46, Public Notice, DA 13-1601, 28 FCC Rcd 10338 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1601A1.pdf.

Section 103. Relay Services

Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; Waivers of iTRS Mandatory Minimum Standards, CG Docket No. 03-123, Report and Order, Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, FCC 14-125, 29 FCC Rcd ___ (rel. Aug. 22, 2014) (seeking comment on the definition of telecommunications relay services, as amended by the CVAA), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-125A1.pdf.

Section 104. Access to Advanced Communications Services and Equipment

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; Consumer Electronics Association; National Cable & Telecommunications Association; Entertainment Services Association; Petitions for Class Waivers of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advanced Communications Services (ACS) and Equipment by People with Disabilities, CG Docket 10-213, Order, DA 12-1645, 27 FCC Rcd 12970 (CGB 2012) (*CEA, NCTA, ESA Waiver Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-12-1645A1.pdf.

Accessibility Recordkeeping Compliance and Contact Information Reporting Requirements for Entities Subject to Sections 255, 716, and 718 of the Communications Act, Public Notice, DA 13-114, 28 FCC Rcd 415 (CGB 2013) (*2013 RCCCI Registry Notice*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-114A1.pdf.

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; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision, CG Docket Nos. 10-213 and 10-145, WT Docket No. 96-198, Second Report and Order, FCC 13-57, 28 FCC Rcd 5957 (2013) (*Second Report and Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-57A1.pdf.

⁵⁵² This list of Commission actions since October 5, 2012, to implement the CVAA excludes public notices that announce scheduled meetings, upcoming events, pleading cycles for comments and reply comments, administrative matters, or similar notices. See Appendix C for a list of CVAA-related Commission news releases.

Request for Comment Petition for Class Waiver of Commission's Rules for Access to Advanced Communications Services and Equipment by People with Disabilities, CG Docket No. 10-213, Public Notice, DA 13-1686, 28 FCC Rcd 11147 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1686A1.pdf.

New Procedures for Telecommunications and Advanced Communications Accessibility Complaints, Public Notice, DA 13-2177, 28 FCC Rcd 15712 (CGB 2013) (*Complaint Procedures Notice*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-2177A1.pdf.

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; Coalition of E-Reader Manufacturers' Petition for Class Waiver of Sections 716 and 717 of the Communications Act and Part 14 of the Commission's Rules Requiring Access to Advance Communications Services (ACS) and Equipment by People with Disabilities, CG Docket No. 10-213, Order, DA 14-95, 29 FCC Rcd 674 (CGB 2014) (*E-Reader Waiver Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-95A1.pdf.

Accessibility Recordkeeping Compliance and Contact Information Reporting Requirements for Entities Subject to Sections 255, 716, and 718 of the Communications Act, Public Notice, DA 14-354, 29 FCC Rcd 2827 (CGB 2014) (*2014 RCCCI Registry Reminder*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-354A1.pdf.

Section 105. National Deaf-Blind Equipment Distribution Program⁵⁵³

Bureau Announces 2013-2014 State Allocations for the National Deaf-Blind Equipment Distribution Program, Public Notice, DA 13-1488, 28 FCC Rcd 9243 (CGB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1488A1.pdf.

Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, Section 105, Relay Services for Deaf-Blind Individuals; Order Extending NDBEDP Pilot Program to June 30, 2015, CG Docket No. 10-210, Order, DA 14-170, 29 FCC Rcd 1234 (CGB 2014) (*NDBEDP Pilot Program Third Year Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-170A1.pdf.

Bureau Announces 2014-2015 State Allocations for the National Deaf-Blind Equipment Distribution Program, Public Notice, DA 14-947, 29 FCC Rcd 8056 (CGB 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-947A1.pdf.

Consumer and Governmental Affairs Bureau Seeks Comment on the National Deaf-Blind Equipment Distribution Program, CG Docket No. 10-210, Public Notice, DA 14-1128, 29 FCC Rcd 9451 (CGB 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1128A1.pdf.

⁵⁵³ From May 2013 to August 2014, the Commission released various public notices inviting applications for and announcing the certification of entities selected to distribute equipment in Nevada, Mississippi, Vermont, Nebraska, Indiana, Minnesota, and Iowa. Each of the entities previously certified for those states relinquished their certification and were replaced in a timely fashion to avoid disruption of service to low-income individuals who are deaf-blind in in those states.

Section 106. Emergency Access Advisory Committee

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment, PS Docket Nos. 11-153 and 10-255, Further Notice of Proposed Rulemaking, FCC 12-149, 27 FCC Rcd 15659 (2012) (*Text-to-911 FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-149A1.pdf.

EAAC, *Report of Emergency Access Advisory Committee (EAAC) Subcommittee 1 on Interim Text Messaging to 9-1-1* (Mar. 1, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319329A1.pdf.

EAAC, *Emergency Access Advisory Committee (EAAC) Working Group 3 Recommendations on Current 9-1-1 and Next Generation 9-1-1: Media Communication Line Services Used to Ensure Effective Communication with Callers with Disabilities* (Mar. 1, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319394A1.pdf.

EAAC, *Emergency Access Advisory Committee (EAAC) Report on TTY Transition* (Mar. 11, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-319386A1.pdf.

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment, PS Dockets Nos. 11-153 and 10-255, Report and Order, FCC 13-64, 28 FCC Rcd 7556 (2013) (*Bounce-Back Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-64A1.pdf.

EAAC, *Emergency Access Advisory Committee (EAAC) Report on procedures for calls between TTY users and NG9-1-1 PSAPs* (Jun. 14, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321705A1.pdf.

EAAC, *Emergency Access Advisory Committee (EAAC) Proposed procedures for the TTY as a text terminal in legacy 9-1-1 PSAPs without IP connection* (Jun. 14, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321704A1.pdf.

EAAC, *Emergency Access Advisory Committee (EAAC) Working Group 7 Report on Recommendations on Time Alignment* (Jun. 14, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-321740A1.pdf.

EAAC, *Emergency Access Advisory Committee (EAAC) Report on gaps in NENA i3 NG9-1-1 specifications related to EAAC accessibility reports* (Jul. 10, 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-322164A1.pdf.

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment, PS Docket Nos. 11-153 and 10-255, Policy Statement and Second Further Notice of Proposed Rulemaking, FCC 14-6, 29 FCC Rcd 1547 (2014) (*Text-to-911 Policy Statement and Text-to-911 Second FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-6A1.pdf.

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment, PS Docket Nos. 11-153 and 10-255, Second Report and Order and Third Further Notice of Proposed Rulemaking, FCC 14-118, 29 FCC Rcd 9846 (2014), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-118A1.pdf.

Section 201. Video Programming Access Advisory Committee**Section 202. Video Description and Closed Captioning*****Video Description***

Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013) (*Emergency Information and Video Description Order and FNPRM*) (seeking additional comment on video description pass-through obligations), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf.

Media Bureau Seeks Comment on Video Description in Video Programming Distributed on Television and on the Internet, MB Docket No. 11-43, Public Notice, DA 13-1438, 28 FCC Rcd 9043 (MB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-1438A1.pdf.

Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket No. 11-43, Report to Congress, DA 14-945, 29 FCC Rcd 8011 (MB 2014), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-14-945A1.pdf.

Accessible Emergency Information

Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB 12-107, Notice of Proposed Rulemaking, FCC 12-142, 27 FCC Rcd 14728 (2012), (*Emergency Information and Video Description NPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-142A1.pdf.

Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013) (*Emergency Information and Video Description Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf.

Closed Captioning on Video Programming Delivered Using Internet Protocol

Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket No. 11-154, Order on Reconsideration and Further Notice of Proposed Rulemaking, FCC 13-84, 28 FCC Rcd 8785 (2013) (*Closed Captioning Order on Reconsideration and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-84A1.pdf.

Media Bureau Seeks Comment on Closed Captioning of Internet Clips, MB Docket No. 11-154, Public Notice, DA 13-2392, 28 FCC Rcd 16699 (MB 2013), available at https://apps.fcc.gov/edocs_public/attachmatch/DA-13-2392A1.pdf.

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, MB 11-154, Second Order on Reconsideration and Second Further Notice of Proposed Rulemaking, FCC 14-97, 29 FCC Rcd 8687 (2014) (*Video Clips Order*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-97A1.pdf.

Exemptions Based on Economic Burden

Section 203. Closed Captioning Decoder and Video Description Capability

Apparatus – Closed Captioning Requirements

Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket No. 11-154, Order on Reconsideration and Further Notice of Proposed Rulemaking, FCC 13-84, 28 FCC Rcd 8785 (2013) (*Closed Captioning Order on Reconsideration and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-84A1.pdf.

Apparatus – Video Description and Emergency Information Requirements

Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket No. 12-107, Notice of Proposed Rulemaking, FCC 12-142, 27 FCC Rcd 14728 (2012) (*Emergency Information and Video Description NPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-142A1.pdf.

Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010; Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-107 and 11-43, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-45, 28 FCC Rcd 4871 (2013) (*Emergency Information and Video Description Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-45A1.pdf.

Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013) (*User Interfaces, Programming Guides and Menus Order and FNPRM*) (seeking additional comment on whether to require access to the secondary audio stream used for audible emergency information by a mechanism that is reasonably comparable to a button, key, or icon), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf.

Section 204. User Interfaces on Digital Apparatus

Accessibility of User Interfaces, and Video Programming Guides and Menus, MB Docket No. 12-108, Notice of Proposed Rulemaking, FCC 13-77, 28 FCC Rcd 8506, (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-77A1.pdf.

Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013) (*User Interfaces, Programming Guides and Menus Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf.

Section 205. Access to Video Programming Guides and Menus Provided on Navigation Devices

Accessibility of User Interfaces, and Video Programming Guides and Menus, MB Docket No. 12-108, Notice of Proposed Rulemaking, FCC 13-77, 28 FCC Rcd 8506, (2013), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-77A1.pdf.

Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, MB Docket Nos. 12-108 and 12-107, Report and Order and Further Notice of Proposed Rulemaking, FCC 13-138, 28 FCC Rcd 17330 (2013) (*User Interfaces, Programming Guides and Menus Order and FNPRM*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-138A1.pdf.

APPENDIX C

Commission Outreach and Education

FCC staff made presentations or disseminated information about the CVAA, the Accessibility Clearinghouse, and consumer rights and remedies available under Sections 255, 716, and 718 of the Communications Act at the following conferences and events from October 5, 2012 to October 8, 2014. These events were attended by individuals with disabilities, industry representatives, government officials, and other stakeholders.

Date(s)	Group Name (Type of Event)	Location
October 12, 2012	Emergency Access Advisory Committee Meeting	Washington, DC
October 18, 2012	M-Enabling Conference (conference)	Milan, Italy
October 22, 2012	Delegation from Japan (Japan Federation of the Deaf) (meeting)	Washington, DC
October 23, 2012	National Association of State Relay Administration (conference)	Orlando, FL
October 23-25, 2012	Hawaii Access 911 (conference)	Waikiki, HI
November 1, 2012	Delegation from Nigeria (meeting)	Washington, DC
November 2, 2013	American Council of the Blind of Maryland Convention (conference)	Baltimore, MD
November 9, 2012	Emergency Access Advisory Committee Meeting	Washington, DC
December 1, 2012	D. C. Public Library (workshop)	Washington, DC
December 5, 2012	Deaf and Hard of Hearing Consumer Advocacy Network (workshop)	Washington, DC
December 6, 2012	Delegation from Japan (Nippon Foundation) (meeting)	Washington, DC
December 14, 2012	Emergency Access Advisory Committee Meeting	Washington, DC

Date(s)	Group Name (Type of Event)	Location
December 19, 2012	FCC Chairman's Awards for Advancement in Accessibility (event)	Washington, DC
January 7, 2013	Consumer Electronics Show Government Affairs Council (workshop)	Las Vegas, NV
January 11, 2013	Emergency Access Advisory Committee Meeting	Washington, DC
January 29, 2013	Practicing Law Institute/2013 Broadband and Cable Law Conference (conference)	New York City, NY
February 24, 2013	American Council of the Blind Legislative Council (workshop)	Arlington, VA
February 8-9, 2013	University of Macerata, Italy: U.S. Laws on Communications and Television Access (instructional presentation)	Macerata, Italy (remote presentation)
February 25, 2013	American Council of the Blind Legislative Seminar (conference)	Arlington, VA
March 1, 2013	Emergency Access Advisory Committee Meeting	Washington, DC
April 5, 2013	American University School of Law Symposium on Intellectual Property and Federal Policy (conference)	Washington, DC
April 9, 2013	National Training Conference sponsored by Deaf and Hard of Hearing In Government: Disability Presentation (workshop)	Washington, DC
April 15, 2013	National Association of State Relay Administration Conference (conference)	Washington, DC
April 16, 2013	TRS Fund Advisory Council (workshop)	Baltimore, MD
April 26, 2013	FCC Consumer Advisory Committee Meeting (briefing)	Washington, DC
May 8, 2013	Deaf-Blind Training Presentation (videoconference)	Videoconference

Date(s)	Group Name (Type of Event)	Location
May 10, 2013	DC Office on Aging's Senior Symposium (symposium)	Washington, DC
May 18, 2013	DC Office of the Chief Technology Officer's Digital DC Conference (conference)	Washington, DC
May 20, 2013	DDW/Department of State EMPOWER program with group of Filipinos (meeting)	Washington, DC
May 23-27, 2013	Germany Deaf History International Organization (instructional seminars in three cities)	Frankfurt, Timmendorfer, and Munich, Germany
June 3-4, 2013	International Telecommunications Union, Telecommunications Sector (various workshops)	Geneva, Switzerland (remote from Gallaudet University, Washington, DC)
June 5, 2013	Pre-M-Enabling Summit Briefing Sessions on Implementation of the 21st Century Communications and Video Accessibility Act (conference)	Washington, DC
June 6-7, 2013	M-Enabling Summit (conference)	Arlington, VA
June 5, 2013	Sprint STARS Conference (conference)	(remote from Washington, DC)
June 12, 2013	Cloud and Accessibility Workshop at the National Science Foundation (workshop)	Arlington, VA
June 14, 2013	Emergency Access Advisory Committee Meeting	Washington, DC
June 18, 2013	State and Local Government Webinar: Accessible Next Generation 911 and Text to 911 (webinar)	Washington DC
July 1, 2013	National Association of Telecommunications Officers and Advisors (webinar)	Briefing via Webinar, Washington, DC

Date(s)	Group Name (Type of Event)	Location
July 16, 2013	Accessibility & Innovation Initiative Speaker Series Presents Clayton Lewis: The Future of Inclusive Design Online (speaker series)	Washington, DC
July 20-23, 2013	National Council of La Raza's Annual Conference (conference)	New Orleans, LA
August 6, 2013	National Night Out (event)	Washington, DC
August 14-17, 2013	M-Enabling Australasia Conference (conference)	Sydney, Australia (also remote to Brisbane and Melbourne)
August 27, 2013	Deaf Seniors of America (workshop)	Baltimore, MD
September 12, 2013	Accessibility & Innovation Initiative Speaker Series Presents Yevgen Borodin: Improving Accessibility for the General Public (speaker series)	Washington, DC
September 26, 2013	Telecommunications Equipment Distribution Program Association Conference (conference)	Albuquerque, NM (remote presentation via video conferencing)
October 7, 2013	FCC Intergovernmental Advisory Committee (meeting)	Washington, DC
October 29, 2013	The Cutting Edge of Access: How Social Media is Advancing Opportunities for People with Disabilities to Connect, Create and Contribute (instructional seminar)	San Francisco, CA (remote participation)
October 30, 2013	Southeast Regional Institute on Deafness Conference (conference)	Orlando, FL
November 2, 2013	Maryland Association of the Deaf and PCRID Joint Conference (conference)	Columbia, MD
November 2, 2013	American Council of the Blind of Maryland Convention (convention)	Baltimore, MD
November 6, 2013	TIA TR-41 Standards Committee Meeting (meeting)	Arlington, VA

Date(s)	Group Name (Type of Event)	Location
November 21, 2013	CTIA's Accessibility Outreach Initiative (workshop)	Washington, DC
December 4-6, 2013	National Conference of State Legislatures (NCSL) (conference)	Washington, DC
January 15, 2014	American Council of the Blind Legislative Seminar (conference)	Washington, DC
January 17, 2013	iTRS National Outreach Program Stakeholders Meeting (meeting)	Washington, DC
January 28, 2014	Practicing Law Institute/2014 Broadband and Cable Law Conference (conference, panel presentation)	New York City, NY
February 6, 2014	Delegation from Poland (meeting)	Washington, DC
February 12, 2014	Delegation from Japan (Nippon Foundation): (meeting via video conferencing)	Washington, DC
February 18, 2014	Workshop on IP-Based Relay Technologies (workshop)	Washington, DC
March 5, 2014	Community Emergency Response Team (training and presentation)	Washington DC
March 11, 2014	Accessibility & Innovation Initiative Speaker Series Presents Juan Gilbert: Innovation in Voting Accessibility (speaker series)	Washington, DC
March 19, 2014	Hearing Loss Association of America Update on FCC Disability Regulations (webinar)	Washington, DC (remote participation)
March 21, 2014	Federal Communications Bar Association Brown Bag (instructional session)	Washington, DC
March 23-26, 2014	NENA Goes to Washington (conference)	Washington, DC
April 12, 2014	Telecommunications Industry Association Spring Policy Summit (conference)	Cambridge, MD

Date(s)	Group Name (Type of Event)	Location
April 22, 2014	State and Local Government Webinar on Closed Captioning Quality Rules (webinar)	Washington, DC
April 22, 2014	USDA/Forest Service: FCC Captioning Rules (training)	Washington, DC
April 24-25, 2014	2014 Jacobus tenBroek Disability Law Symposium (conference)	Baltimore, MD
April 15, 2014	Interstate Telecommunications Relay Service Fund Advisory Council Meeting (meeting)	Harrisburg, PA
May 7, 2014	Sprint STARS Conference (conference)	Hollywood, FL (via video remote)
May 20, 2014	Hoover Middle School (instructional presentation)	Rockville, MD
June 9, 2014	Presentation of Chairman's Awards for Advancement in Accessibility (event)	Arlington, VA
June 9-10, 2014	M-Enabling Summit (conference)	Arlington, VA
June 11, 2014	M-Enabling International Policy Briefing (policy briefing)	Washington, DC
June 17, 2014	NENA Education and Training Conference (conference)	Nashville, TN (via video conference)
June 26-29, 2014	Hearing Loss Association of America Annual Conference (conference)	Austin, TX
June 27 - July 1, 2014	American Library Association Annual Conference (conference booth)	Las Vegas, NV
July 1-5, 2014	52nd Biennial National Association of the Deaf Conference (conference)	Atlanta, GA
July 13-15, 2014	American Council of the Blind Video Description Conference (conference)	Las Vegas, NV (prior taping prepared for delivery)

Date(s)	Group Name (Type of Event)	Location
July 15, 2014	Association of Assistive Technology Act Programs (ATAP) (meeting)	Washington, DC
July 17, 2014	FCC's Accessibility and Innovation Initiative: "Accessing Social Media" (workshop)	Washington, DC
July 23, 2014	National Consumers League/American Association of People with Disabilities Symposium on Consumer Protection for People with Disabilities (conference)	Washington, DC
July 29, 2014	U.S. Access Board and Federal CIO Council webinar series on Section 508 best practices (remote presentation)	Washington, DC
July 30 - August 1, 2014	International Deaf-Blind Expo (conference)	Las Vegas, NV
August 1-2, 2014	American Association of the Deaf-Blind Symposium (conference)	Las Vegas, NV
August 20, 2014	Telecommunications Industry Association, TR-41 (accessibility) Committee Meeting (meeting)	Arlington, VA
September 6, 2014	Howard County Association of the Deaf (presentation)	Highland, MD
September 19-20, 2014	Telecommunications Equipment Distribution Program Association Conference (conference)	Portland, ME
September 21, 2014	Interstate Telecommunications Relay Service Fund Advisory Council Meeting (meeting)	Portland, ME
September 22-23, 2014	National Association for State Relay Administration Conference (conference)	Portland, ME

CVAA-related Commission News Releases

The FCC released the following news releases pertaining to the CVAA and related activities, from October 5, 2012 to October 8, 2014.

- FCC Chairman Julius Genachowski to Honor Innovators in Accessibility Communications Technologies – December 5, 2012
https://apps.fcc.gov/edocs_public/attachmatch/DOC-317727A1.pdf
- FCC Chairman Julius Genachowski Announces Voluntary Commitment by Major U.S. Wireless Carriers & Public Safety Leaders to Accelerate Nationwide Text-to-911 Services; Calls for Continued Engagement with FCC on Next-Generation 9-1-1 Initiatives – December 6, 2012
https://apps.fcc.gov/edocs_public/attachmatch/DOC-317786A1.pdf
- FCC Proposes Action to Accelerate the Availability of Nationwide Text-to-911 Service – December 12, 2012
https://apps.fcc.gov/edocs_public/attachmatch/DOC-317918A1.pdf
- FCC Chairman Genachowski Honors Innovators in Accessibility Communications Technology in Ceremony Today – December 19, 2012
https://apps.fcc.gov/edocs_public/attachmatch/DOC-318051A1.pdf
- FCC Adopts Rules to Help Inform and Protect Consumers During the Transition to Text-to-911 – May 17, 2013
https://apps.fcc.gov/edocs_public/attachmatch/DOC-321040A1.pdf
- FCC Announces ‘Improving Accessibility for the General Public’ Event to Highlight & Encourage Innovation in Accessibility Technologies – September 3, 2013
https://apps.fcc.gov/edocs_public/attachmatch/DOC-323140A1.pdf
- FCC Adopts New Rules to Make Video Devices Accessible to People with Disabilities – October 29, 2013
https://apps.fcc.gov/edocs_public/attachmatch/DOC-323761A1.pdf
- Acting Chairwoman Mignon Clyburn Statement on FCC’s Adoption of New Rules Making Digital Communications More Accessible to People with Disabilities – October 29, 2013
https://apps.fcc.gov/edocs_public/attachmatch/DOC-323766A1.pdf
- FCC Sets Path for Widespread Text-to-911 Deployment – January 30, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-325351A1.pdf
- FCC Chairman’s Award Winner to Address ‘Innovation in Voting Accessibility’ at Accessibility & Innovation Event – February 12, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-325600A1.pdf
- FCC Seeking Nominations for the Third Annual Chairman’s Awards for Advancement in Accessibility (Chairman’s AAA) – February 12, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-325592A1.pdf

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- FCC Moves to Upgrade TV Closed Captioning Quality – February 20, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-325695A1.pdf
 - FCC Chairman Wheeler to Honor Innovators in Accessibility Communications Technology with Annual Awards – June 4, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-327441A1.pdf
 - FCC Chairman Wheeler Honors Innovators in Accessibility Communications Technology with Annual Awards – June 9, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-327485A1.pdf
 - FCC Launches Support Line for Consumers who are Deaf and Hard of Hearing Using American Sign Language over Videophone – June 10, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-327495A1.pdf
 - FCC Holding Workshop on Accessibility and Social Media – July 10, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-328151A1.pdf
 - FCC Moves to Ensure Online Video Clips Are Accessible to Americans who are Deaf or Hard of Hearing – July 11, 2014
https://apps.fcc.gov/edocs_public/attachmatch/DOC-328173A1.pdf

APPENDIX D**CVAA Consumer Guides**

The consumer guides listed below have been prepared and distributed by the FCC to provide consumers and industry with easy-to-understand information about the CVAA and its implementing regulations.

Twenty-First Century Communications and Video Accessibility Act of 2010

HTML:

<http://www.fcc.gov/guides/21st-century-communications-and-video-accessibility-act-2010>

PDF:

<http://www.fcc.gov/cgb/consumerfacts/CVAA-access-act.pdf>

National Deaf-Blind Equipment Distribution Program

HTML:

<http://www.fcc.gov/guides/national-deaf-blind-equipment-distribution-program>

PDF:

<http://transition.fcc.gov/cgb/consumerfacts/NDBEDP.pdf>

Video Description

HTML:

<http://www.fcc.gov/guides/video-description>

PDF:

http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-314799A1.pdf

Captioning of Internet Video Programming

HTML:

<http://www.fcc.gov/guides/captioning-internet-video-programming>

PDF:

<http://www.fcc.gov/cgb/consumerfacts/captionsinternet.pdf>

Display of Captioning on Equipment Used to View Video Programming

HTML:

<http://www.fcc.gov/guides/display-captioning-equipment-used-view-video-programming>

PDF:

<http://www.fcc.gov/cgb/consumerfacts/captionsequipment.pdf>