In the Matter of 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

MEMORANDUM OPINION AND ORDER

Adopted: November 16, 2016
Released: November 16, 2016

By the Chief, Media Bureau:

I. INTRODUCTION

1. In this Memorandum Opinion and Order, we address a joint petition filed by the American Council of the Blind (ACB), the American Foundation for the Blind (AFB), and the National Association of Broadcasters (NAB) (collectively, Petitioners) requesting that the Commission grant a limited extension of the Federal Communications Commission’s (FCC or Commission) rule requiring broadcasters to provide an aural representation of visual, non-textual emergency information, such as radar maps or other graphics, on a secondary audio stream. For the reasons set forth below, we grant the Petition, subject to the requirement that the Petitioners provide a status report to the Media Bureau and the Consumer and Governmental Affairs Bureau on efforts to develop a technical solution on November 22, 2017.

II. BACKGROUND

2. On April 8, 2013, pursuant to the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), the Commission adopted a rule requiring that emergency information provided visually during non-newscast programming be made accessible to individuals who are blind or visually impaired. See also Amendment of Twenty-First Century Communications and Video Accessibility Act of 2010, Pub. L. No. 111-265, 124 Stat. 2795 (2010) (making technical corrections to the CVAA). Section 202 of the CVAA directed the Commission to identify methods to convey emergency information in a manner accessible to individuals who are blind or visually impaired, and to promulgate rules requiring video programming providers, video programming distributors, and program owners to convey emergency information in a manner accessible to individuals who are blind or visually impaired. See id.; 47 U.S.C. § 613(g)(1)-(2).

3 “Emergency information” is defined in Section 79.2 of the Commission’s rules as “[i]nformation, about a current emergency, that is intended to further the protection of life, health, safety, and property, i.e., critical details regarding the emergency and how to respond to the emergency. Examples of the types of emergencies covered include tornadoes, hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread fires, discharge of toxic gases, widespread power failures, industrial explosions, civil disorders, school closings and changes in (continued….)
are blind or visually impaired through the use of a secondary audio stream to provide such information aurally. In particular, the rule provides that the video programming provider or video programming distributor that creates the visual emergency information content and adds it to the programming stream is responsible for providing an aural representation of the information on a secondary audio stream, accompanied by an aural tone. Visual emergency information content can be either textual, e.g., an on-screen crawl, or non-textual, e.g., maps or other graphic displays. In the Emergency Information/Video Description Order, the Commission found that if visual but non-textual emergency information is shown during non-newscast programming, the aural description of this information must accurately and effectively convey the critical details regarding the emergency and how to respond to the emergency.

The rule set a compliance deadline of May 26, 2015.

3. In March of 2015, NAB sought a waiver of the initial deadline for the requirement to aurally describe visual but non-textual emergency information. NAB argued that a waiver was warranted because it was technically infeasible for broadcasters to comply with the requirement to provide an aural representation of maps and other graphic displays. NAB explained that an automated text-to-speech solution cannot be used to aurally describe radar maps and other moving graphics because the software used to generate such graphics does not contain text files that can be converted to speech, and it noted that school bus schedules resulting from such conditions, and warnings and watches of impending changes in weather.” 47 CFR § 79.2(a)(2).

3. In March of 2015, NAB sought a waiver of the initial deadline for the requirement to aurally describe visual but non-textual emergency information. NAB argued that a waiver was warranted because it was technically infeasible for broadcasters to comply with the requirement to provide an aural representation of maps and other graphic displays. NAB explained that an automated text-to-speech solution cannot be used to aurally describe radar maps and other moving graphics because the software used to generate such graphics does not contain text files that can be converted to speech, and it noted that school bus schedules resulting from such conditions, and warnings and watches of impending changes in weather.” 47 CFR § 79.2(a)(2).

4. Id. § 79.2(b)(2)(ii).

5. A “video programming provider” is “[a]ny video programming distributor and any other entity that provides video programming that is intended for distribution to residential households including, but not limited to broadcast or nonbroadcast television network and the owners of such programming.” Id. § 79.1(a)(12). A “video programming distributor” is “[a]ny television broadcast station licensed by the Commission and any multichannel video programming distributor as defined in § 76.1000(e) of this chapter, and any other distributor of video programming for residential reception that delivers such programming directly to the home and is subject to the jurisdiction of the Commission.” Id. § 79.1(a)(11).


7. See Emergency Information/Video Description Order, 28 FCC Rcd at 4891-92, para. 24. “Critical details include, but are not limited to, specific details regarding the areas that will be affected by the emergency, evacuation orders, detailed descriptions of areas to be evacuated, specific evacuation routes, approved shelters or the way to take shelter in one’s home, instructions on how to secure personal property, road closures, and how to obtain relief assistance.” Note to 47 CFR § 79.2(a)(2).

8. 47 CFR § 79.2(b)(2)(ii). See also Emergency Information/Video Description Order, 28 FCC Rcd at 4900-01, para. 37. With respect to textual emergency information, the Media Bureau granted NAB’s request for a six-month waiver of the rule’s deadline. Broadcasters were required to be in compliance as of November 30, 2015 with the requirement to provide aurally on the secondary audio stream emergency information presented visually in text in non-newscast programming. See 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, Memorandum Opinion and Order, 30 FCC Rcd 5012, 5021-22, para. 16 (2015) (2015 Waiver).

9. See 2015 Waiver, 30 FCC Rcd at 5022-23, para. 17. This waiver is set to expire on November 26, 2016.

further work is needed to develop and implement reliable automated solutions. The Media Bureau granted the waiver in order to provide the broadcast industry with time to develop a technical solution for compliance, but limited the waiver to 18 months as requested by AFB and ACB.

4. For the reasons discussed below, ACB, AFB, and NAB jointly request that the Commission grant an extension of this waiver for an additional 18 months.

5. We evaluate Petitioners’ waiver request pursuant to the general waiver authority in Section 1.3 of the Commission’s rules. To waive a requirement for good cause, we must (1) explain why deviating from the general requirement serves the public interest, and (2) explain the nature of the special circumstances.

III. DISCUSSION

6. While we emphasize the importance of the requirement in Section 79.2(b)(2)(ii) to aurally describe visual but non-textual emergency information, we find that there is good cause to waive this requirement for an additional 18 months to allow time for the development and implementation of a viable automated solution. In their Petition, ACB, AFB, and NAB contend that broadcasters remain unable to comply with this requirement because an automated solution that will provide the capability to aurally describe visual but non-textual emergency information has not yet been developed by third-party vendors.

Petitioners indicate that “vendors remain stymied by the challenge of automatically creating descriptions for radar maps and other moving graphics that are generated by software that does not contain text files that can be converted into speech.” NAB contacted “potential developers” of a technical solution, who “confirmed that no such technology currently exists or is expected to be produced in the foreseeable future,” and it surveyed a number of its television station members, who also

---

11 See id.; 2015 Waiver, 30 FCC Rcd at 5022, para. 17.
12 2015 Waiver, 30 FCC Rcd at 5022, para. 17.
15 47 CFR § 1.3 (“The provisions of this chapter may be suspended, revoked, amended, or waived for good cause shown, in whole or in part, at any time by the Commission, subject to the provisions of the Administrative Procedure Act and the provisions of this chapter. Any provision of the rules may be waived by the Commission on its own motion or on petition if good cause therefor is shown.”). We note that the Commission generally delegated authority to the Media Bureau and the Consumer and Governmental Affairs Bureau to consider waiver requests of the rules adopted in the Emergency Information/Video Description Order. Emergency Information/Video Description Order, 28 FCC Rcd at 4887-89, para. 20. See 47 CFR §§ 0.61, 0.283, and 1.3.
17 See Petition at 5.
18 Id.
confirmed that “no such technology or solution is available, despite industry outreach and requests.” ACB emphasizes that both ACB and AFB have been engaged with NAB over the past year on this issue and, thus, they understand the complexities faced by broadcasters who do not yet have an automated technical solution available to them.

7. Petitioners maintain that an additional 18-month waiver is warranted. According to Petitioners, the additional time will allow broadcasters and accessibility advocates to continue coordinating with vendors on a technical solution as well as to explore other potential sources for a solution, and will give the Commission’s Disability Advisory Committee (DAC) time to consider the issue. ACB says that Petitioners’ “intent in the near term is to engage with leaders in the tech industry to identify projected pathways toward incorporating artificially intelligent application program interfaces (API), and determine if such software solutions exist and could then be incorporated into the downstream broadcast of infographics that could then describe the content in real time.”

8. NFB, the only commenter to oppose the Petition, contends that if an extension is to be granted at all, it should be for no more than 12 months with no further extensions at the end of this period, and that there should be a requirement for quarterly progress reports. NFB argues that the Petition “greatly over-complicates” the process for aurally describing images and says that having it done automatically “is not the only viable solution.” In particular, NFB notes that “a minimal amount of human intervention to create alternate text to describe the images or graphics displayed in the emergency alert crawl would solve the problem.”

ACB, however, explains that NFB’s suggestion for a non-automated solution is not a viable one for a number of reasons, particularly for stations in smaller markets that may not have adequate staffing. According to ACB, taking a few minutes to create text and insert it in the crawl “can mean the difference between life and death,” the process of representing hazardous conditions through a graphic is complicated, and there is no capability to access alternate text on a television like there is on a computer. ACB also indicates that it is “optimistic” that a real-time automated solution can be identified during the requested 18-month timeframe. It notes that Facebook has already developed technology that gives real-time descriptions of images that are posted, and it is hopeful that the technology industry will make further progress in the development of artificially

---

19 Id. ACB also notes in its reply comments that there is no present solution for providing an automated aural description of radar maps and other dynamic images used by broadcasters. See ACB Reply at 1-2.

20 See ACB Reply at 1.


22 Petition at 6. See also ACB Reply at 1-2. Petitioners note that this issue has not yet been taken up by the DAC, but that they “look forward to consideration of this matter within the DAC.” Petition at 5-6. See also 2015 Waiver, 30 FCC Rcd at 5022, para. 17.

23 ACB Reply at 2.

24 NFB Comments at 2-3.

25 Id.

26 Id. NFB explains that alternate text descriptions are “widely used to describe photos, graphics, and videos on websites in order for screen reading software to describe the images to blind users,” and that such descriptions usually take no more than a few minutes to create, depending on the complexity of the image. Id. NFB also contends that such descriptions could be beneficial to all viewers, not just viewers who are blind or visually impaired, because they can help viewers better understand information displayed on a map. Id.

27 ACB Reply at 1-2.

28 Id. at 1.

29 See NFB Comments at 2-3; ACB Reply at 2.
intelligent interfaces that can be implemented into broadcast technologies.\textsuperscript{30}

9. We find the evidence that Petitioners have put forward to be credible and therefore agree that an additional 18-month waiver period is merited to enable broadcasters to develop and implement an automated approach to compliance with Section 79.2(b)(2)(ii). We believe that a long-term, automated solution is preferable to a short-term, manual solution that requires station personnel to describe every graphic, particularly given that such an approach may be burdensome to broadcasters and may raise its own technical complexities. We find that the development of an automated solution that broadcasters can use to aurally describe maps and other graphics on the secondary audio stream will benefit both broadcasters and consumers who are blind or visually impaired. We also believe that, given the evidence that the Petitioners have submitted, 12 months is unlikely to be an adequate period for broadcasters to find an effective means to comply with Section 79.2(b)(2)(ii). While we grant the request for an additional 18-month waiver period, we emphasize that upon expiration of this waiver, covered entities will be required to aurally describe visual but non-textual emergency information provided by broadcasters, such as the critical details of an emergency conveyed by radar maps and other graphic displays.

10. We agree with NFB that it is important that the critical details of an emergency that are conveyed in radar maps and other graphic displays are made accessible to individuals who are blind or visually impaired, consistent with the Commission’s rule.\textsuperscript{31} In cases described by Petitioners where the critical details of an emergency and how to respond to the emergency conveyed by a map or other graphic display are also provided via a corresponding on-screen text crawl that is made aurally accessible on a secondary audio stream, then the broadcaster would not need to take further steps to be in compliance.\textsuperscript{32} In other words, if the critical information provided in radar maps is duplicative of the information provided in a crawl and merely provides additional clarity, no automated solution is necessary. However, in cases where a radar map or other graphic display conveys critical details of an emergency and how to respond that are not also provided in an on-screen text crawl, the broadcaster must make that information audibly accessible to individuals who are blind or visually impaired on the secondary audio stream at the expiration of the waiver period.

11. In addition, we agree with NFB that Petitioners should be required to submit a status report that describes the progress of stakeholders working to develop a technical solution.\textsuperscript{33} ACB contends that quarterly reporting is unnecessary because ACB and AFB will continue to be engaged with NAB, as advocacy groups for the blind and visually impaired, and they intend to keep the Commission informed on progress during the extension.\textsuperscript{34} We welcome informal progress reports during the duration of the waiver period, but we think it would be helpful to the Commission and to consumers to have a formalized, public report on the status of efforts to develop a solution. Although NFB suggests that such a report should be made quarterly, we think a better approach is to require a status report in one year, which will allow us to make a broader assessment of the progress toward an automated technical solution for making visual, non-textual emergency information aurally accessible. Therefore, we find that

\textsuperscript{30} See ACB Reply at 2.

\textsuperscript{31} See NFB Comments at 2; 47 CFR § 79.2(b)(2)(ii). According to NFB, the Petition is contradictory because, on the one hand, it states that the important details about an emergency and how to respond conveyed by a map or other graphic are also contained in a separate crawl in most cases, rendering much of the non-textual emergency information “superfluous.” NFB Comments at 1 (citing Petition at 4-5). But, on the other hand, the Petition states that if the Commission does not grant a waiver, broadcasters will be forced to remove maps and other images and deprive all viewers of the information contained therein, which suggests that the emergency information conveyed by maps is not duplicative of the information conveyed in a crawl. See id. at 2 (citing Petition at 6). It argues that radar maps and graphics do provide critical information and must be made accessible. Id. at 2.

\textsuperscript{32} See 2015 Waiver, 30 FCC Rcd at 5023, para. 17.

\textsuperscript{33} See NFB Comments at 2-3.

\textsuperscript{34} ACB Reply at 2.
Petitioners must provide a status report to the Media Bureau and the Consumer and Governmental Affairs Bureau on efforts to develop a technical solution on November 22, 2017. The report should include information about the extent to which images are conveyed with a corresponding on-screen crawl that includes the critical details conveyed by that image regarding the emergency and how to respond to the emergency. The report should also include information about the development of automated description solutions, such as artificially intelligent APIs.

IV. ORDERING CLAUSES

12. Accordingly, IT IS ORDERED that, pursuant to the authority found in Sections 4(i), 4(j), and 713 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), and 613, and Sections 0.61, 0.283, and 1.3 of the Commission’s rules, 47 CFR §§ 0.61, 0.283, and 1.3, this Memorandum Opinion and Order IS ADOPTED.

13. IT IS FURTHER ORDERED that the joint petition for limited waiver of Section 79.2(b)(2)(ii) of the Commission’s rules, 47 CFR § 79.2(b)(2)(ii), filed by the American Council of the Blind, the American Foundation for the Blind, and the National Association of Broadcasters IS GRANTED, subject to the requirement that, on November 22, 2017, the Petitioners provide a status report to the Media Bureau and the Consumer and Governmental Affairs Bureau of the FCC on efforts to develop a technical solution.

14. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

FEDERAL COMMUNICATIONS COMMISSION

William T. Lake
Chief, Media Bureau