

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington D.C. 20554**

In the Matter of

Closed Captioning of Internet	)	
Protocol-Delivered Video Programming:	)	
Implementation of the Twenty-First Century	)	MB Docket No. 11-154
Communications and Video Accessibility	)	
Act of 2010	)	

**COMMENTS  
OF THE CONSUMER ELECTRONICS ASSOCIATION  
REGARDING FURTHER NOTICE OF PROPOSED RULEMAKING**

**I. INTRODUCTION AND SUMMARY**

The Consumer Electronics Association (“CEA”)<sup>1</sup> respectfully submits these comments on the issues raised in the above-captioned *Further Notice of Proposed Rulemaking* (“FNPRM”), which the Commission released along with the *IP Captioning Reconsideration Order*.<sup>2</sup>

CEA appreciates several Commission actions in the *IP Captioning Reconsideration Order*. That order, which revised portions of the *IP Captioning Order* adopted in 2012,<sup>3</sup> has

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<sup>1</sup> CEA is the principal U.S. trade association of the consumer electronics and information technologies industries. CEA’s more than 2,000 member companies lead the consumer electronics industry in the development, manufacturing and distribution of audio, video, mobile electronics, communications, information technology, multimedia and accessory products, as well as related services, that are sold through consumer channels. Ranging from giant multinational corporations to specialty niche companies, CEA members cumulatively generate more than \$203 billion in annual factory sales and employ tens of thousands of people in the United States.

<sup>2</sup> See *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, Order on Reconsideration and Further Notice of Proposed Rulemaking, 28 FCC Rcd 8785 (2013). In these comments, ¶¶ 5-31 of that item will be referred to as the “*IP Captioning Reconsideration Order*” and ¶¶ 32-37 will be referred to as the “*FNPRM*.” CEA filed a petition for reconsideration as well as an opposition and a reply in the proceeding that led to adoption of the *IP Captioning Reconsideration Order* and *FNPRM*.

both clarified and simplified compliance with the closed captioning regime introduced by Sections 202 and 203 of the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”).<sup>4</sup>

In considering the remaining issues of interest to the Commission that are posed in the *FNPRM*, the Commission should avoid imposing regulations not required by the CVAA, particularly because overly proscriptive regulations would stifle innovation and limit manufacturers’ flexibility in bringing cost-effective consumer devices to the American people. Thus:

- The Commission should not impose synchronization requirements on apparatus because such requirements would inappropriately assume that consumer devices somehow are the source of synchronization errors when there is no evidence of such errors.
- In light of the increasing prominence of streamed media, rather than removable media, in today’s markets, the Commission should not impose requirements in excess of those mandated in the CVAA on removable media players.

On October 1, 2013, CEA met regarding the issues raised in the *FNPRM* with several disability experts and representatives of advocacy groups for people with hearing impairments.<sup>5</sup> As a result of this meeting, CEA increased its understanding of the issues that Americans with disabilities face. CEA intends to meet further with these representatives and also assist them in meeting with other industry groups, such as video programming distributors and owners, that may be better suited to address these issues.

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<sup>3</sup> See *Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, Report and Order, 27 FCC Rcd 787 (2012) (“*IP Captioning Order*”).

<sup>4</sup> Pub. L. No. 111-260, §§ 202, 203, 124 Stat. 2751, 2767-2773 (2010) (“CVAA”) (codified at 47 U.S.C. §§ 613, 303 and note).

<sup>5</sup> See *Telecommunications for the Deaf and Hard of Hearing, Inc. et al*, Motion for Extension of Time, MB Docket No. 11-154, at 3 (Aug. 14, 2013).

## II. THE COMMISSION SHOULD NOT IMPOSE A CLOSED CAPTION SYNCHRONIZATION REQUIREMENT ON DEVICE MANUFACTURERS

When considering synchronization issues, it is critical to understand that existing industry standards CEA-608, CEA-708, and Society of Motion Picture and Television Engineers Timed-Text format (“SMPTE-TT”) all have mechanisms with implicit or explicit timing information to ensure that decoders “know” when to display captions. Yet proper caption display timing also requires proper caption encoding. Based on CEA’s knowledge, caption decoders are not the cause of the alleged synchronization issues discussed in the *FNPRM*. Therefore, the Commission should not require manufacturers to ensure that their apparatus synchronize the appearance of closed captions with the display of the corresponding video, as raised in paragraph 32 of the *FNPRM*.<sup>6</sup> Rather, the rules are properly designed to place the responsibility for synchronization in the first instance with the content provider.

A synchronization requirement for apparatus would implicitly assume that consumer devices somehow introduce synchronization issues into caption decoding, but CEA is unaware of any such behavior. Captioning systems that are built on standards are end-to-end systems. Further regulation in this area would disrupt the current standards for IP closed captioning and the SMPTE-TT safe harbor by assuming decoder issues that, to CEA’s knowledge, do not exist. The Commission should rely on the safe harbor as written, which in turn allows device manufacturers to build standards-compliant products that are known to work with properly encoded content.

The traditional television captioning mechanisms — CEA-608 for analog video and CEA-708 for digital video — provide methods for associating caption data with specific video

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<sup>6</sup> See *FNPRM*, 28 FCC Rcd at 8805-8806, ¶ 32.

frames. Both CEA-608 and CEA-708 captions are supplied to receivers with implied timing information — captions arrive in intervals, correlated to the video being displayed. CEA-608 caption data is embedded in the analog vertical blanking interval, which has a known timing relationship to interlaced fields making up the video frame. CEA-708 captions are carried as “user data” along with the compressed video frame data, which provides a strict timing relationship between captions and video frames. Receivers can only display the captions as they are received in accordance with the caption commands. There would be no reason for receivers to delay caption display, as it would consume memory (even if available) for no purpose.

Under the SMPTE-TT format, caption data is processed after it arrives and is then displayed according to explicit caption timing information. SMPTE-TT includes two methods of signaling timing for caption presentation. The first method stipulates a specific day and time for the presentation of caption text — information that is not suitable for ordinary use. When timing information is specified in this manner, recording or delaying the delivery of content would yield no captions whatsoever. The second method available in SMPTE-TT for signaling timing information is *relative* timing, which indicates the length of time the captions should be displayed, as well as the length of time between captions. Decoders routinely process this information as it is presented to them – they have no control over whether the information presented to them ensures proper synchronization.

If the Commission were to adopt an apparatus synchronization obligation, it should only require that apparatus render captions according to the timing data included with the video programming. This “do no harm” standard would mean that if a device receives properly captioned content, then it would have to appropriately decode and display, or pass through, the content and captions. If it receives content that is not properly captioned, then the device is

technically unable to (and should not be required somehow to) create its own caption timing, or otherwise correct or resolve an issue that is outside of its control. Apparatus cannot be expected to correct timing errors in the data provided by video programming distributors or owners, a point that was discussed among CEA members and disability experts and representatives of advocacy groups for people with hearing impairments during the October 1, 2013 meeting.

**III. BECAUSE THE RENDERING OR PASS-THROUGH OF SUBTITLES BY REMOVABLE MEDIA PLAYERS SATISFIES SECTION 303(u) OF THE ACT, NO ADDITIONAL REQUIREMENTS ON SUCH PLAYERS SHOULD BE ADOPTED**

Removable media players that support Subtitles for the Deaf and Hard of Hearing (“SDH”) meet the baseline captioning requirements of the CVAA for removable media (*e.g.*, DVD or Blu-ray Disc™).<sup>7</sup> Accordingly, the Commission should not take any more action with regard to these media players.

The *FNPRM* seeks comment on whether, as a legal matter, rendering or passing through subtitles could satisfy the requirement of Section 303(u) of the Act.<sup>8</sup> Section 303(u), as amended by Section 203 of the CVAA, requires only that apparatus “be equipped with built-in closed caption decoder circuitry or capability designed to display closed-captioned video programming.”<sup>9</sup> Removable media players are so equipped.

The Described and Captioned Media Program, which the *IP Captioning Order* cites as an authoritative source,<sup>10</sup> considers SDH to be a form of “captioning” for video content.<sup>11</sup> Although

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<sup>7</sup> See *FNPRM*, 28 FCC Rcd at 8807-8808, ¶ 37.

<sup>8</sup> See *id.*

<sup>9</sup> 47 U.S.C. § 303(u).

<sup>10</sup> *IP Captioning Order*, 27 FCC Rcd at 846, ¶ 99 n.398.

the *FNPRM* notes that the *IP Captioning Order* “recognized that SDH does not offer the same user control features as closed captioning,”<sup>12</sup> Section 303(u) does **not** specifically require that devices include user control features for manipulating closed captions in removable media players. Thus, removable media players that support SDH subtitles meet the statutory captioning requirements of the CVAA for removable media (e.g., DVD or Blu-ray Disc<sup>TM</sup>).<sup>13</sup> Alternatively, the Commission should consider the use of SDH by removable media players to be an “alternate means” of complying with the captioning regulations, consistent with Section 203(e) of the CVAA.<sup>14</sup>

Removable media players should not be required to support the closed captioning specified for other types of apparatus in the new rules when, as discussed above, these devices can and do support accessibility for removable media content consistent with the CVAA. Because streamed media is increasingly prominent in the consumer marketplace,<sup>15</sup> additional regulations on removable media players will simply raise costs for consumers and hasten the decline of removable media technology. Thus, the Commission should not require that removable media players render or include an analog output, as raised in paragraph 36 of the *FNPRM*.<sup>16</sup> Because the CVAA did not require closed captioning to be included on removable

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<sup>11</sup> See Shannon Chenoweth, Described and Captioned Media Program, *What are Captions?*, at 1-2 (2008), available at <http://www.dcmp.org/caai/nadh170.pdf>.

<sup>12</sup> 28 FCC Rcd at 8808, ¶ 37 n.151, citing *IP Captioning Order*, 27 FCC Rcd at 846, ¶ 100.

<sup>13</sup> See CVAA § 202(a).

<sup>14</sup> See *FNPRM*, 28 FCC Rcd at 8808, ¶ 37 & n.151.

<sup>15</sup> See, e.g., Janko Roettgers, *Netflix May Ditch DVDs Sooner Rather Than Later*, Bloomberg Businessweek (Oct. 21, 2013), available at <http://www.businessweek.com/articles/2013-10-21/netflix-may-ditch-dvds-sooner-rather-than-later>.

<sup>16</sup> See *FNPRM*, 28 FCC Rcd at 8807, ¶ 36.

media discs or content, requiring devices to have closed captioning decoding capability will have little practical benefit to people with disabilities.

#### **IV. CONCLUSION**

CEA requests the Commission to consider the issues raised in the *FNPRM* consistent with the recommendations expressed in these comments.

Respectfully submitted,

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ASSOCIATION

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