

**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)	

**REPLY COMMENTS
OF THE CONSUMER ELECTRONICS ASSOCIATION**

I. INTRODUCTION AND SUMMARY

The Consumer Electronics Association (“CEA”) respectfully responds to comments filed on the issues raised in the above-captioned *Further Notice of Proposed Rulemaking (“FNPRM”)*, which the Commission released with its *IP Captioning Reconsideration Order*.¹ CEA appreciates the Commission’s efforts to gather more information on the open issues in this proceeding to reduce the potential harm that could result from imposing additional and unneeded regulatory requirements.

The record in this proceeding² provides no basis for claims that apparatus caption decoders somehow cause any noticeable synchronization problems. Because such evidence is

¹ 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 reply 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*.” The *IP Captioning Reconsideration Order* revised portions of the *IP Captioning Order* adopted in 2012. 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*”).

² Unless otherwise noted, all comments cited herein are short-cited, and refer to comments filed on or about November 4, 2013 in MB Docket No. 11-154.

lacking, the Commission should not risk hampering innovation by imposing synchronization requirements on apparatus. Similarly, there is no need to impose additional requirements on removable media players. Contrary to the assertions of some commenters, removable media players do in fact meet the baseline captioning requirements of Section 203 of the Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”).³

II. AN APPARATUS CLOSED CAPTION SYNCHRONIZATION REQUIREMENT IS UNJUSTIFIED AND WOULD HAMPER INNOVATION

The Commission should not impose synchronization requirements on apparatus. Caption decoders are not the cause of synchronization issues and, contrary to the assertions of Telecommunications for the Deaf and Hard of Hearing et al. (“TDI”), neither existing captioning standards nor the safe harbor standard adopted by the Commission for closed captioning of Internet protocol (“IP”)-delivered video programming provides any method for associating caption data with particular video frames.⁴

TDI’s assertion that the record “amply demonstrates” that apparatus can cause noticeable synchronization problems lacks any credible support. A single demonstration performed over a year ago,⁵ cannot be the basis for imposing new regulatory requirements on apparatus manufacturers. As TDI acknowledges,⁶ the synchronization disparities observed during the demonstration may have resulted from network bandwidth problems or other issues that are unrelated to the closed caption functionality of apparatus, such as the design of the video

³ Pub. L. No. 111-260, §§ 202, 203, 124 Stat. 2751, 2767-2773 (2010) (“CVAA”) (codified at 47 U.S.C. §§ 613, 303 and note), *amended by* Pub. L. 111-265, 124 Stat. 2795 (2010).

⁴ *See* TDI Comments at 1, 6-7.

⁵ *See id.* at 4-5, 8. TDI did not replicate this demonstration during its October 1, 2013, meeting with CEA.

⁶ *See id.* at 5 (agreeing that network bandwidth problems could contribute to a caption synchronization problem).

programming distributor's ("VPD") network. In the absence of sound evidence that a significant synchronization problem exists, the Commission should not risk chilling innovation by adopting an apparatus synchronization requirement.

As CEA has explained repeatedly, caption decoders are not the source of synchronization problems.⁷ For live-captioned content, delays from several to tens of seconds are expected. For other content, any repeatable timing issues are most likely related to content authoring, and any unrepeatable timing issues are most likely related to network problems. Also, in many cases VPDs use their own applications, devices, or plug-ins to render the video programming, including captions. These factors minimize the possibility that a consumer's apparatus will introduce possible synchronization issues.⁸

TDI claims that caption timing data may not be "adhered to by rendering devices,"⁹ but does not provide specific examples of synchronization problems that were clearly caused by devices. TDI's assertion that apparatus manufacturers have "admitted" that video post-processing performed by apparatus can cause synchronization problems is misleading.¹⁰ As previously explained in this proceeding, the delay caused by video post-processing is at most a very short, unnoticeable delay measured in milliseconds.¹¹

⁷ See CEA Comments at 3-4; CEA Opposition to Petitions for Reconsideration, MB Docket No. 12, at 18-19 (filed June 7, 2012).

⁸ See *id.* at 17-19 & n.59. Speculation about whether the Commission's current rules will provide consumers with an adequate remedy is premature, given that the deadline for compliance with the rules has not yet arrived. See TDI Comments at 2-3.

⁹ See *id.* at 2.

¹⁰ See *id.* at 3, 5.

¹¹ See Mitsubishi Electric Visual Solutions America Comments at 2 (filed June 7, 2012).

TDI misunderstands the technology in arguing that standard closed captioning formats “provide apparatus with the necessary timing data to accurately synchronize captions with video.”¹² Specifically, TDI misunderstands the utility of the timing information described in the Society of Motion Picture and Television Engineers Timed-Text (“SMPTE-TT”) standard. Although it is true that SMPTE-TT has some timing carriage capability, that capability is insufficient to allow a receiver by itself to synchronize captions to video.¹³ The SMPTE-TT format does not provide the information needed for receivers to “accurately synchronize captions with video,” as this is a function of the network and delivery system. Thus, the Commission’s rules rightly are designed to place the responsibility for synchronization in the first instance with the content provider.

Absent reliable evidence that caption decoders are the cause of alleged synchronization issues, the Commission should not disrupt the current standards for IP closed captioning and the SMPTE-TT safe-harbor format by imposing additional regulations in this area. Instead, the Commission should rely on the SMPTE-TT safe harbor as written, which in turn allows device manufacturers to build standards-compliant products that are known to work with properly encoded content.¹⁴

¹² See TDI Comments at 1.

¹³ SMPTE-TT only carries timing information as an offset from the beginning or end of the content, or as an absolute time-of-day. See World Wide Web Consortium (W3C), Timed Text Markup Language 1 (TTML1), §§ 6.2.11, 10.3.1 (2nd ed. Sept. 24, 2013), available at www.w3.org/TR/ttml1-dfxp. TTML is the basis for SMPTE-TT.

¹⁴ See CEA Comments at 3-4.

III. THERE IS NO NEED TO IMPOSE ADDITIONAL REQUIREMENTS ON REMOVABLE MEDIA PLAYERS

The comments on issues involving removable media players (*e.g.*, DVD or Blu-ray Disc™ players) largely repeat arguments seen earlier in this proceeding. As CEA explained in its initial comments,¹⁵ removable media players already meet the baseline captioning requirements of the CVAA for removable media, and there is no need for the Commission to take additional action with respect to these devices.

Commenters in favor of requiring Blu-ray players to render or pass through closed captions from Blu-ray discs fail to explain how imposing such a requirement on manufacturers of Blu-ray players would somehow cause the captioning of removable media content by content creators that are not obligated to caption such content under the Commission’s rules.¹⁶ TDI unrealistically argues that requiring Blu-ray players to render captions will “usher in a new era of captioned removable media in the same way that the Commission’s rules implementing the Television Decoder Circuitry Act ushered in the modern era of captioned broadcast, cable, and satellite programming.”¹⁷ This is a gross overstatement. TDI refuses to acknowledge that *unlike removable media content*, the Commission has authority to require closed captioning of broadcast, cable, and satellite programming.

Arguments regarding the costs of adding closed captioning functionality to standalone removable media players are inaccurate and misleading.¹⁸ While some DVDs carry CEA-608

¹⁵ *See id.* at 5-7.

¹⁶ *See* TDI Comments at 12; Maryland Governor’s Office of the Deaf and Hard of Hearing (“ODHH”) Comments at 1; Ronald Vickery Comments at 6.

¹⁷ TDI Comments at 12.

¹⁸ *See* Dana Mulvany Comments at 2; *see also* Ronald Vickery Comments at 2, 3-4, 5.

captions, Blu-ray, the current generation of removable media player, does not include the technology necessary to support CEA-608 or -708 caption decoding.¹⁹ Moreover, removable media are capable of overlaying textual graphics (subtitles), and those textual graphics are carried through to the display. Some formats (like DVDs) can carry CEA-608 captions, but other formats (like Blu-ray discs) cannot. However, both Blu-ray discs and DVDs support subtitles, including Subtitles for the Deaf and Hard of Hearing (“SDH”). If the Commission were to require CEA-608-style decoders in removable media players, this would duplicate existing functionality for DVDs (which have subtitles and, for some outputs, caption passthrough) and provide no additional capability for Blu-ray discs (which do not carry CEA-608-style captions at all). New rules in this area would impose significant additional costs on these products, costs that the consumer market will not support.²⁰

Because removable media players already support a form of captioning, there is no need to impose additional requirements in order for these devices to meet the CVAA’s baseline captioning requirements for removable media. Section 303(u) of the Communications Act (the “Act”), as amended by Section 203 of the CVAA, requires that covered apparatus “be equipped with built-in closed caption decoder circuitry or capability designed to display closed-captioned video programming.”²¹ Removable media players routinely decode and display SDH, which have been recognized as a form of “captioning” for video content.²² Thus, removable media

¹⁹ See generally CEA Written *Ex Parte* Submission, MB Docket Nos. 11-154 & 12-107, at 3 (filed Feb. 26, 2013).

²⁰ See *id.*

²¹ 47 U.S.C. § 303(u)(1)(A).

²² See Shannon Chenoweth, Described and Captioned Media Program, *What are Captions?*, at 1-2 (2008), available at <http://www.dcmp.org/caai/nadh170.pdf>; see also *IP Captioning Order*, 27 FCC Rcd at 846, ¶ 99 n.398.

players already satisfy Section 303(u) of the Act with respect to removable media, and the Commission need not impose additional requirements on these devices.²³

Alternatively, pursuant to Section 203(e), the rendering or pass through of subtitles by removable media players is an alternate means of compliance with the captioning requirements of the CVAA with respect to removable media. TDI is incorrect that any permissible alternate means of compliance must meet “functionality standards required by the CVAA” for two reasons.²⁴ First, the CVAA contains no such functionality standards for apparatus captioning capability.²⁵ Second, the CVAA explicitly states that entities may meet the applicable requirements of the Communications Act through means other than those prescribed by the Commission’s rules.²⁶ Section 303(u) does not specifically require that devices include user control features for manipulating closed captions in removable media players. Instead, such user control features have been “prescribed by regulations.” Because user control features have been prescribed by the Commission’s rules, pursuant to Section 203(e), entities may comply with the captioning requirements of Section 303(u) through alternate means that do not involve support of those prescribed features, such as by rendering or passing through subtitles.

Because removable media players render or pass through SDH, there is no need to require that all video outputs on such devices be capable of transmitting closed captioning data

²³ Because removable media players already satisfy the baseline captioning requirements of Section 303(u), TDI’s assertion that the transition to HDMI outputs is effectively leaving consumers who are deaf or hard of hearing without access to modern removable media players is inaccurate. *See* TDI Comments at 10.

²⁴ *See id.* at 13.

²⁵ *See* CVAA § 203.

²⁶ *See id.* § 203(e).

as mandated for other apparatus.²⁷ Commenters generally agree that requiring all removable media players to include analog outputs is undesirable.²⁸ In particular, with respect to Blu-ray players, requiring analog connections for the playback of prerecorded Blu-ray disc content would undo an important technical measure to protect such content from unauthorized copying and redistribution and would conflict with the scheduled “sunset” of analog outputs for Blu-ray players that are distributed after December 31, 2013.²⁹

IV. CONCLUSION

CEA requests that the Commission consider the issues raised in the *FNPRM* consistent with the recommendations expressed in CEA’s comments and these reply comments.

Respectfully submitted,

CONSUMER ELECTRONICS
ASSOCIATION

By: /s/ Julie M. Kearney
Julie M. Kearney
Vice President, Regulatory Affairs
Brian E. Markwalter
Senior Vice President, Research and
Standards
Alexander B. Reynolds
Senior Manager & Regulatory Counsel

Consumer Electronics Association
1919 S. Eads Street
Arlington, VA 22202
(703) 907-7644

December 4, 2013

²⁷ See ODHH Comments at 3.

²⁸ See Advanced Access Content System Licensing Administrator (“AACSLA”) Comments at 2; TDI Comments at 12; Ronald Vickery Comments at 1; Dana Mulvany Comments at 2.

²⁹ See generally AACSLA Comments at 1-2.