

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

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

To: The Commission

REPLY COMMENTS OF HARRIS CORPORATION

Harris Corporation (“Harris”) respectfully submits these Reply Comments in response to Comments filed addressing the Federal Communications Commission’s (“Commission”) *Notice of Proposed Rulemaking* (“NPRM”) ¹ implementing Sections 202(b) and 203 of Twenty-First Century Communications and Video Accessibility Act of 2010 (“CVAA”).² The focus of Harris’ Reply Comments are on the Commission’s proposal choosing not to specify a standard interchange format for the closed captioning of Internet Protocol (“IP”) delivered video programming subject to Section 202(b) of the CVAA.³ Harris urges the Commission to adopt the Video Programming Accessibility Advisory Committee’s (“VPAAC”) recommendation⁴ to specify the Society of Motion Picture and Television Engineers’ Timed Text (“SMPTE-TT”) as

¹ *In re* Closed Captioning of Internet Protocol-Delivered Video Programming: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010, *Notice of Proposed Rulemaking*, MB Docket No. 11-154 (rel. Sept. 19, 2011) (“NPRM”).

² *Twenty-First Century Communications and Video Accessibility Act of 2010*, Pub. L. No. 111-260, 124 Stat. 2751 (2010) (“An Act to increase the access of persons with disabilities to modern communications, and for other purpose”).

³ *NPRM*, ¶ 40.

⁴ *See* 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, *First Report*, pgs 16-20 and 26-27 (rel. Jul. 13, 2011) (“VPAAC Report”).

the standard interchange format for the closed captioning of IP delivered video programming.⁵ As a manufacturer of video and audio encoding equipment,⁶ Harris believes that specifying SMPTE-TT as the standard interchange format will provide certainty to industry and consumers, minimize product costs, and facilitate the timely implementation of the CVAA.

Harris is an international communications and information technology company serving government and commercial markets in more than 150 countries. Harris Broadcast Communications,⁷ a division of Harris, is headquartered in Denver, Colorado, and operates the world's largest broadcast transmitter factory in Quincy, Illinois. Harris Broadcast Communications also maintains research centers in Mason, Ohio, Vista, California, Northridge, California, Ridgewater, New Jersey, and Pottdam, Pennsylvania. Harris Broadcast Communications is the leader in digital solutions for video and audio content providers and distributors. Harris has been at the forefront of the transition to digital technology and is committed to helping its customers succeed in the digital age.

Adopting SMPTE-TT as the standard interchange format would be in the public interest as it would advance the goals of the CVAA to provide broadcast quality closed captioning of IP delivered programming for consumers who are deaf and hard-of-hearing. As noted by the VPAAC, "of the solutions available, SMPTE-TT best meets all the requirements...."⁸ The VPAAC goes on to note that SMPTE-TT is "already being employed in production

⁵ "Contrary to the Commission's concern, the VPAAC Report represents a considered, near-consensus technical recommendation from a cross section of all stakeholders in providing IP captioning." *Comments of Consumer Electronic Association*, MB Docket No. 11-154, pg. 7 (filed Oct. 18, 2011).

⁶ Harris' Selenio™ Media Convergence Platform integrates baseband video and audio processing, compression and IP networking in a single platform. For more information visit: <http://www.broadcast.harris.com/products/seleniomediamConvergencePlatform/default.asp>.

⁷ See <http://www.broadcast.harris.com/broadcastoverview/background.asp>.

⁸ *Id.* at 26.

environments to repurpose television content for Internet usage.”⁹ Commenters in this proceeding have pointed out that failure to adopt a standard interchange format will (1) result in industry confusion,¹⁰ (2) detrimentally impact consumers,¹¹ (3) slow industry adoption of closed captioning for IP video programming,¹² and (4) increase equipment and deployment costs.¹³ Congress authorized the Commission to begin this proceeding for the express purpose of increasing access to modern communications to consumers who are deaf and hard-of-hearing. Adopting SMPTE-TT as the standard interchange format would serve the public interest by facilitating access to IP delivered video programming for those who are deaf or hard-of-hearing through broadcast quality closed captioning.

For Harris, failure to adopt the SMPTE-TT as the standard interchange format would require Harris to engage in financially burdensome product development to support an

⁹ Id.

¹⁰ “The Commission should follow [VPAAC’s] recommendation. Otherwise, various parties in the distribution chain will lack certainty and guidance...” *Comments of Nat’l Ass’n of Broadcasters*, pg. 30, MB Docket No. 11-154 (filed Oct. 18, 2011)(“NAB Comments”); “[T]he Commission should specify those standards that satisfy the CVAA. Such stipulation will provide the industry with some level of some certainty regarding the parameters within which it can operate.” *Comments of TechAmerica*, MB Docket No. 11-154, pg. 3 (filed Oct. 18, 2011); “MPAA also agrees with VPAAC that promotion of a default format makes sense at this early stage, so that disputes over interchange formats do not bog down implementation efforts. *Comments of the Motion Picture Ass’n of America*, MB Docket No. 11-154, pg. 11 (filed Oct. 18, 2011) (“MPAA Comments”).

¹¹ “The Commission should follow [VPACC’s] recommendation. Otherwise,...consumers may suffer and will not know to whom to complain.” *NAB Comments*, at 30; “Adopting SMPTE-TT . . . will ensure reliable consumer access to IP captioning.” *CEA Comments*, at 7.

¹² “For caption interchange that has not been long subject to a *de facto* interchange format requirement, it is both clear that SMPTE-TT is the appropriate format and that absent a regulation requiring its use for interchange, commercial effects will increase the costs and delay captioning of IP-delivered content.” *Comments of Rovi Corp.*, MB Docket No. 11-154, at 7 (filed Oct. 18, 2011)(“Rovi Comments”); “[T]he VPAAC assumed the use of SMPTE-TT when it recommended an aggressive timetable for implementation of the new rules.” *MPAA Comments*, at 11.

¹³ “[A]ll parties—including the FCC—will be forced to expend more time and resources to ensure the success of an IP captioning regime.” *NAB Comments*, at 30; “Manufacturers of covered apparatus cannot be expected to support any and every possible delivery format. Requiring such support would be costly and inefficient without furthering Congress’s intent to increase the accessibility of video programming.” *CEA Comments*, at 5.

unspecified number of closed captioning standards.¹⁴ Instead of devoting resources to developing products that need to comply with numerous unproven closed captioning standards, Harris could devote its resources to working with interested parties to enhance the capabilities of SMPTE-TT—a point already noted by other commenters.¹⁵ While no government mandate requires Harris to develop products that would meet all possible IP closed captioning interchange format standards, Harris would have no other choice if it wants to remain competitive in the equipment marketplace. Competition in the equipment marketplace is often defined by those who have the capability to provide product for the greatest number of standards. Content providers and distributors would expect that Harris would develop encoders that meet all possible closed captioning standards.¹⁶ Standards are at the core of Harris product development, however, developing equipment to meet a wide array of standards can be financially burdensome and if done needlessly can significantly drive up equipment costs.

To encourage technological innovation there must be clear financial incentive. Unfortunately, there is minimal financial incentive to significantly innovate in the closed captioning marketplace. Congress drafted the CVAA to address a clear marketplace deficiency, the inability of industry to provide closed captioning of IP delivered video programming for those who are deaf or hard-of-hearing through market forces. Failure to adopt appropriate “rules of the road” for implementing and enforcing this new closed captioning requirement would ultimately hurt those that were meant to benefit from enactment of the CVAA.

¹⁴ “[A]bsent a regulation for [SMPTE-TT] for interchange, commercial effects will increase the costs and delay captioning of the IP-delivered content” *Rovi Comments*, at 7.

¹⁵ “Starz recommends the SMPTE-TT standard . . . [it would] enable VPDs/VPPs to dedicate resources on using the closed captioning data to improve and enhance the delivery and presentation of closed captioning.” *Comments of Starz Entertainment, LLC*, MB Docket No. 11-154, pg. 5 (filed Oct. 18, 2011).

¹⁶ SMPTE-TT is the only existing industry-wide technical standard for these purposes that has been adopted through an open process.” *MPAA Comments*, at 11.

As a cutting edge technology company Harris believes that innovation should not be stifled by unnecessary regulatory mandates. Harris applauds and agrees with commenters that recognize the importance of innovation, but Harris disagrees with those who suggest the impact of the Commission adopting a standard interchange format would stifle innovation.¹⁷ First, interested parties always have the opportunity to engage in the SMPTE standards process to modify the SMPTE-TT standard as needed. Second, if video content and video distribution providers agree they would like to use an interchange format other than SMPTE-TT they can either Petition the Commission to amend the existing rules, or request a Waiver of the Commission’s rules. Adopting the SMPTE-TT as the standard interchange format and access to clear avenues for modification of the SMPTE-TT standard—the SMPTE standards process—or use of alternative standards—the waiver process or rulemaking—would advance the Commission’s goal to “maximum[ize] technological innovation”¹⁸ while avoiding the consequences of an uncertain, ad hoc process that could increase costs and slow access to closed captioned IP delivered programming.

Harris agrees with other commenters that if the Commission decides not to adopt SMPTE-TT as the standard interchange format, the Commission should deem all entities that use SMPTE-TT for interchange or delivery¹⁹ as technically compliant with the Commission’s closed

¹⁷ “Because an environment of competition necessarily will cause any single technical specification to rapidly become outdated, mandating a single delivery or interchange format would remove incentives to innovate, and result in a *de facto* industry winner to the detriment of customers.” *Comments of Google*, MB Docket No. 11-154, at 5 (filed Oct. 18, 2011); “[T]he marketplace is rapidly changing and the Commission is hesitant to identify a particular technology standard that may have the effect of freezing innovation.” *Comments of Microsoft Corporation*, MB Docket No. 11-154, at 16 (filed Oct. 18, 2011).

¹⁸ *NPRM*, ¶ 40.

¹⁹ Harris agrees with the VPAAC’s recommendation regarding delivery and agrees with the VPAAC’s conclusion that “[t]he use of a single interchange format does not imply that there should be one single standard for delivery of the captioned programming to the devices and applications that consumers use to display the content.” *VPAAC Report*, at 17.

captioning requirements.²⁰ However, Harris supports this alternative only if the Commission decides not to adopt SMPTE-TT as the standard interchange format. Harris does not believe that this strategy would eliminate all the problems and uncertainty that could arise by failing to adopt SMPTE-TT as the standard interchange format.

For the foregoing reasons, Harris strongly encourages the Commission to adopt SMPTE-TT as the standard interchange format for the closed captioning of IP delivered video programming.

Respectfully Submitted,

Harris Corporation
600 Maryland Avenue, S.W.,
Suite 850E
Washington, D.C. 20024
(202) 729-3702

/s/

Jay C. Adrick
Vice President, Broadcast Technology
Harris Corporation

Evan S. Morris, Esq.
Counsel, Government Relations
Harris Corporation

Jessica Elder
Legal Clerk, Government Relations
Harris Corporation

November 1, 2011

²⁰ See *Comments of the Telecommunications Industry Association*, MB Docket No. 11-154, pg. 14 (filed October 18, 2011); see also *CEA Comments*, pgs. 5-9.