

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

In the Matter of)	
)	
Petition for Declaratory Ruling and Petition)	RM-11848
for Rulemaking on Live Closed Captioning)	CG Docket No. 05-231
Quality Metrics and the Use of Automated)	
Speech Recognition Technologies)	

**REPLY COMMENTS
OF THE NATIONAL ASSOCIATION OF BROADCASTERS**

Pursuant to 47 C.F.R. § 1.405(b), the National Association of Broadcasters (NAB)¹ files reply comments on the above-captioned Petition for Rulemaking, which sought a proceeding to consider quantifiable metrics for measuring the quality of live closed captioning.² As NAB explained, such a rulemaking is unnecessary because the existing caption quality standards and best practices,³ coupled with an extensive compliance program,⁴ have yielded high-quality captions.⁵ The record does not justify the requested change in approach to ensuring caption quality.

When establishing the quality standards in the 2014 Caption Quality Order, the Commission aimed to improve accessibility to video programming without imposing undue

¹ NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and also broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

² Petition for Declaratory Ruling and/or Rulemaking, Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI) *et al.*, CG Docket No. 05-231, RM-11848 (July 31, 2019) (Petition).

³ *Closed Captioning of Video Programming, TDI Petition for Rulemaking*, Report and Order, Declaratory Ruling, and Second Further Notice of Proposed Rulemaking, 29 FCC Rcd 2221, 2264-66 (2014) (2014 Caption Quality Order).

⁴ *Closed Captioning of Video Programming, TDI Petition for Rulemaking*, Second Report and Order, 31 FCC Rcd 1469 (2016).

⁵ Opposition of NAB, RM-11848, CG Docket No. 05-231 (Oct. 15, 2019).

burdens on industry,⁶ consistent with the Communications Act.⁷ The Commission in the 2014 Caption Quality Order thus rejected calls for caption quality metrics because requiring video programming distributors (VPDs) to monitor thousands of hours of programming and compare the quality of live captions against some quantifiable standard would be too onerous.⁸ NCTA notes that doing so remains an “enormous and expensive administrative burden” that would divert funds that could otherwise be directed to enhanced content or technology.⁹ The amount of broadcast news and other live programming that require closed captioned has also grown since the rules became effective in 2014.

Instead of quantifiable metrics, the Commission decided after a careful analysis to implement the caption quality standards and best practices to ensure accessibility. The caption quality docket included more than 1,600 comments and *ex parte* letters,¹⁰ as well as numerous meetings with stakeholders. This exhaustive record informed the Commission’s conclusion that the quality standards and best practices would successfully deliver “high quality captions to viewers,”¹¹ while metrics “may be more burdensome, yet less effective.”¹² Imposing a metrics-based enforcement scheme would upset the careful balance the Commission struck between the benefits of enhanced captions and the excessive impact on broadcasters of more rigid requirements.

⁶ 2014 Caption Quality Order, 29 FCC Rcd at 2264.

⁷ See, e.g., 47 U.S.C. § 613(d) and (e) (setting forth criteria for exemption if providing captions would be unduly burdensome).

⁸ 2014 Caption Quality Order, 29 FCC Rcd at 2264.

⁹ Comments of the NCTA – The Internet & Television Ass’n, RM-11848, CG Docket No. 05-231 (Oct. 15, 2019), at 4.

¹⁰ *Id.* at 3.

¹¹ 2014 Caption Quality Order, 29 FCC Rcd at 2257.

¹² *Id.* at 2264.

The record fails to justify reconsideration of the Commission’s approach. The Captioning DRRP filed a so-called “qualitative analysis” of the informal survey referenced in the Petition,¹³ which alleged extensive captioning problems. However, the Captioning DRRP’s comments merely sum and categorize the narrative feedback from some respondents,¹⁴ but offer no additional evidence regarding captioning issues. Nor do they provide any information to validate the survey’s methodology or results, such as the survey’s response rate, how the survey was conducted, the age or gender of respondents or whether they had any prior bias concerning captions or the Commission’s rules.¹⁵ Furthermore, neither the Captioning DRRP’s comments nor anything else in the record counter hard evidence from the Commission that consumer complaints about closed captioning have dramatically diminished since the quality standards became effective.¹⁶ We also note that the Commission has not issued any Notices of Apparent Liability concerning captions since the quality standards were implemented.

Broadcasters have spent the past five years reviewing and routinizing their practices to provide high-quality closed captions that meet the Commission’s standards and adhere to the best practices. We have also continued to improve consumer access to station staff and efficiently resolve consumer complaints. These efforts are borne out by the Commission’s data, and should not be rewarded with more stringent, unnecessary metrics.

¹³ Petition at 10-11 citing an “informal” survey by the Hearing Loss Ass’n of America (HLAA) (May-June 2019).

¹⁴ Comments of the Twenty-First Century Captioning Disability and Rehabilitation Research Project (Captioning DRRP), CG Docket No. 05-231, RM-11848 (Oct. 15, 2019).

¹⁵ NAB Opposition at 6.

¹⁶ *Id.* at 7-8 citing <https://opendata.fcc.gov/Consumer/CGB-Consumer-Complaints-Data/3xyp-aqkj> (showing a 42% drop in complaints following the 2014 Caption Quality Order); see also NCTA Comments at 8-9.

The record underscores the difficulty of creating viable, consensus metrics, as well as the unreasonableness of imposing quantifiable metrics on live captioning. Even the Petitioners acknowledge that creating such metrics “has not become substantially simpler” since 1997.¹⁷ The challenges to captioning live programming are well-documented, particularly the extreme time constraints that make perfect accuracy and synchronicity nearly impossible. As Meredith explains, captioning is essentially a human creation, and humans inevitably make mistakes. Imposing quantifiable standards on live captions will not eliminate human errors.¹⁸ Problems can also arise due to equipment or Internet failures, unexpected deviations from a script and other unplanned disruptions. NAB also described the many questions concerning enforcement of a metrics-based scheme, such as how to identify and count errors, e.g., words or phrases, spelling, and how to assess mistakes that do not affect comprehension. Given this ambiguity, the Commission should be wary that imposing metrics on caption quality could potentially discourage the production of desired programming in order to minimize the risks of noncompliance.

While Petitioners state that the Captioning DRRP is working to develop metrics for caption quality,¹⁹ this project is still in the early days and whether it will ultimately result in viable, consensus metrics is uncertain. Although some commenters support the adoption of caption quality metrics, even some of these parties note the lack of consensus and limitations of various methods.²⁰

¹⁷ Petition at 15; NCTA Comments at 4; Comments of Meredith Corp., CG Docket No. 05-231, RM-11848 (Oct. 15, 2019), at 2.

¹⁸ Meredith Comments at 1-2.

¹⁹ See [Disability and Rehabilitation Research Project on Twenty-First Century Captioning Technology, Metrics and Usability](#).

²⁰ Comments of AppTek, CG Docket No. 05-231, RM-11848 (Oct. 15, 2019), at 9 (describing its use of the Number, Edition and Recognition Errors (NER) model for some assessments,

The existing caption quality standards, best practices and compliance program have successfully ensured high-quality captions. NAB finds no justification in the record to change course by imposing an uncertain, inflexible metrics-based scheme. At a minimum, the requested proceeding is far from ripe, given the nascent nature of the Captioning DRRP's project.

The Petition also requested a declaratory ruling regarding automated speech recognition (ASR) closed captioning. ASR is still a relatively new technique, but has started to show some promise that it could play a useful role in ensuring accessibility to video programming. NCTA notes that some of its members have rolled out ASR on some networks and found that ASR can produce more complete live captions than human captioners.²¹ Given that ASR is based on artificial intelligence and machine learning, it is also more likely to continue to improve than human captioning.²² In general, NAB encourages the Commission to take cautious approach that preserves and promotes the full array of captioning techniques, including ASR, to allow video programming distributors to use the captioning method that best suits their circumstances. Imposing the requested special certifications and other obligations on ASR could unnecessarily hinder its development. If the Commission concludes that a further discussion of best practices for ASR is recommended, NAB submits that the Commission's Disability Advisory Committee would be the most efficient venue.

word error rate (WER) metrics for others, and noting still other models such as Automated Caption Error (ACE) and a model developed by WGBH); Comments of Pablo Romero Fresco, CG Docket No. 05-231, RM-11848 (Oct. 13, 2019), at 1-2 (noting that different countries use different variations of NER for evaluating captions).

²¹ NCTA Comments at 11.

²² AppTek Comments at 6.

For the reasons stated above, NAB opposes the proposals in the Petition and requests that the Commission refrain from initiating the requested proceeding.

Respectfully submitted,

NATIONAL ASSOCIATION OF BROADCASTERS
1771 N Street, NW
Washington, DC 20036
(202) 429-5430



Rick Kaplan
Larry Walke

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