

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)
)
Closed Captioning of Video Programming) CG Docket No. 05-231
)
Notice of Proposed Rulemaking)
Released July 21, 2005)
)

COMMENTS OF THE ACCESSIBLE MEDIA INDUSTRY COALITION

November 9, 2005

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1. INTRODUCTION

The Accessible Media Industry Coalition (AMIC) is pleased to respond to the FCC's Notice of Proposed Rulemaking (the "NPRM") adopted on July 14, 2005 to examine the Commission's closed-captioning rules.

2. CREDENTIALS

AMIC is an unincorporated trade association of companies and agencies doing business in the United States to provide services that make audio-visual programming accessible to people with hearing or vision impairments. AMIC was founded in 2003 by 24 such companies, all of which provide captioning, subtitling, and/or video description services to broadcasters, program producers, and other entities that produce and distribute or display audio-visual programs that require accessibility.

The list of companies and agencies that are members of AMIC as of November 1, 2005, is included as Appendix A.

These comments have been shared with and approved by a consensus of the members of AMIC in accordance with the Coalition's Bylaws.

3. DISCUSSION

A. Defining “Captioning”

In its original Report and Order in 1997 implementing Section 305 of the Telecommunications Act of 1996, the Commission required that certain programs be captioned, but failed to provide a definition of what it means for a program to be “captioned.”

The Accessible Media Industry Coalition believes that in order for a program to comply with the mandate for captioning, it must contain legible alphanumeric text representing all essential information contained in the audio during the entire program, including opening and/or closing credits, but excluding any portion of the program that presents aural information in graphic form. For captions to be of use to consumers, they must comply with certain measures of quality: completeness, accuracy, and timeliness. If any of these three is missing or inadequate, the usefulness of the captions will be compromised.

AMIC has created the “16-CARAT Approach to Caption Quality” as a general guideline of what captioning should be. Attached hereto as Appendix B, it provides 16 criteria that factor into the quality of a finished captioning project.

The specifications for how one measures compliance with each of these factors can and should vary depending on whether a program is captioned in advance (offline) or is captioned live in real time. Due to its instantaneous nature, it is not possible for programs captioned live to achieve the same level of completeness, accuracy, and timeliness (i.e. synchronicity of the captions with the audio) as programs captioned offline.

B. The Role of the Video Programming Distributor

Quality should be measured based on the captions as originally transmitted from a Video Programming Distributor (VPD). Compliance with quality specifications, therefore, depends on what the consumer receives.

Obviously, if the captions that leave the VPD's facilities meet the quality specifications established by the FCC, then the program is in compliance. It will be helpful, in those cases when a consumer fails to receive these captions, if the VPD can certify that the captioning was present and acceptable. That knowledge will help the consumer take appropriate action with their equipment, signal reception, or local-service provider. The appropriate place for any investigation of captioning complaints to begin is with the VPD, which is the only entity that can state with any certainty whether captions were encoded and transmitted intact. A few of the possible causes of captioning problems after the signal leaves the network or station are:

- Faulty equipment at the consumer's end;
- Reception problems at the consumer's end;
- Problems introduced at a cable system head-end;
- Problems introduced by a satellite uplink or downlink;

If a complaint to the FCC indicates that the captions transmitted by the VPD fall below the threshold of the quality specifications designated by the FCC, then the program is at risk not to be counted as having been "captioned" under the FCC's mandate. The program provider then should be required to ascertain the cause of the non-compliance observed or reported and take appropriate steps to ensure that it does not recur. Broadcasts that fail to meet quality limits should be treated by the FCC the same as broadcasts that lack captions completely. Failure to provide quality captions is the same as failure to caption at all.

VPD's are expected to achieve the 100% accessibility that the existing rules mandate. However, the Commission should warn rather than fine a VPD for the occasional problems that are likely to occur due to the complex nature of creating accurate captions and preserving their integrity through the entire delivery process. The Commission should promulgate rules that identify, correct, and prevent these problems.

When a consumer complains that captioning quality was unacceptably low, the burden for evaluation of this complaint should rest with the VPD. No other entity is equipped to evaluate and respond. The VPD should be expected to determine whether the received captions matched the transmitted captions. If they did not, then the fault lies beyond the control of the VPD. If the captions did match, then the VPD must make their best effort to determine where the fault lies. If the captions as created do not match the transmitted captions, the VPD should search for possible problems. These "downstream" causes may include, but are not limited to:

- Problems introduced during playback of recorded video at a local station or cable distribution point;
- Faulty equipment at a local station;
- Faulty distribution equipment at a network;
- Faulty encoding equipment at a network;
- Problems introduced in the delivery of caption data to be encoded.

Program producers and distributors also have an obligation to deliver to the captioner the same version of a program's soundtrack that the consumer will receive. Captioners cannot caption what they cannot hear.

C. Defining Captioning Quality

1) The Captioner's Mission

Caption quality is not measured by what goes in, but by the results achieved. In other words, "quality" is a measure of how well the captioner succeeded at his or her mission, which implies first that they understand their mission and then achieve it.

The mission of the captioner is to make a visual presentation as understandable to the non-hearing person as it is to the person who is able to hear the audio that accompanies it, no more and no less. If a missing word or a spelling mistake does not interfere with achieving the mission, then it is insignificant. On the other hand, presenting every word correctly spelled does not constitute good quality if the viewer is unable to read it because timing is poor or it is presented in a way (such as against a full screen of graphics) that renders the caption unreadable.

If the wrong word is given, or if words are misspelled or missing, the viewer will probably be less informed than is intended, or be less scared by the scary movie, or laugh less at the comedy, or weep less at the tragedy. "Caption Quality" refers to those factors that affect the ability of the non-hearing viewer to get the same information and the same viewing experience as the hearing viewer.

In general, to achieve that mission, the captioner must try to represent every spoken word that can be heard coherently by the caption writer, correctly spelled, with adequate reading time, and a clear understanding of who said it. There are technical limitations to what the current line 21 technology is capable of in regards to loading, transmitting captions, and data recovery periods which must be accounted for. Because of these technical limitations inherent in the technology, not every word will always be able to be captioned. The captioner must also present all the non-verbal

"information" that is conveyed to a hearing person through sound effects, music, speaker intonation, etc. Even silences must be appropriately represented when they are significant to the hearing person's comprehension of and emotional reaction to the soundtrack. The expert captioner knows when they can stray from this rigid recipe without undermining the mission.

When the non-hearing viewer fully understands the program and reacts to it in the same emotional way as the hearing viewer, *that* is quality captioning.

2) The Three Main Factors That Determine Quality

As stated above, the three factors that must be measured to evaluate the quality level of program captions are completeness, timeliness, and accuracy.

i. Completeness

In order for program captions to be considered "complete," all of the following must be true:

- a. Captions appear continuously from the start to the end of the broadcast, except to avoid on-screen graphics that provide essentially the same information as the soundtrack, and represent the entire program.
- b. The captions contain meaningful punctuation.
- c. Speakers are identified by symbol (e.g. ">>"), by name (e.g. "Reporter:" or "Joe:"), by color coding (e.g. Jane's captions are always yellow and Joe's captions are always green), or by screen placement (i.e. discrete locations show who is talking).
- d. The decision whether to caption misstarts (e.g. "I...I..."), incomplete words (e.g. "I have alw... I never..."), and non-essential "filler" words (e.g. "Well..." "Um...") and verbal sounds (e.g. "tsk") is subjective, and while these utterances should be

conveyed in many cases, a program will not be considered incomplete if they are occasionally omitted.

- e. Words spoken in a language other than the predominant language of the program should not be required to be captioned, but there needs to be some indication that these words were spoken.
- f. Sounds (other than speech) that substantially affect the ability of the non-hearing person to understand the program must be conveyed.

ii. Timeliness

The synchronicity of captions with the spoken words they represent can vary greatly depending on whether captions are prerecorded or live. Any quality specifications adopted by the Commission should recognize the importance of timeliness and allow for differences between live and prerecorded programs.

iii. Accuracy

Program captions must be accurate to be useful. In general, accuracy depends on the following criteria for the material that actually appears in a caption:

- a. Words should be the correct word, correctly spelled, including the correct form of a homophone (e.g. “there”/”their”);
- b. Numbers should be transcribed correctly in either numeric or alphabetic form;
- c. Currency figures should be identified by the appropriate symbol or word;
- d. There should always be some accurate indication of who is speaking (or singing); and
- e. Complete spoken sentences should be properly terminated by a full stop, a question mark, or an exclamation point.

Note that in the case of live programming, misspellings of proper nouns that were not widely and generally familiar prior to the live event or broadcast should not be counted as errors, in recognition of the frequency of news bulletins that identify previously obscure names of places or people (e.g. Lockerbie, Scotland prior to 1988, or Elian Gonzalez prior to 1999).

3) Objective Measurements

Caption quality must be reviewed and evaluated the same way every time.

Captions should be compared to the audio portion of the program when evaluating accuracy, completeness, and timeliness.

The quality scores of reviewed captions will have meaning only if they are scored consistently across all types of work and various service providers.

If a consumer complaint of poor quality specifies a segment of a program, the evaluation should begin with that segment. Otherwise, the best way to deal with consumer complaints is initially to evaluate a representative sample of the broadcast in question. Sampling will help solve most problems and will keep monitoring costs much lower.

The sample for the *initial* evaluation of compliance should be a continuous, unbroken section of the program no shorter than 20 percent of the program's total length (as measured without commercials). It is recognized that brief samples can yield misleading results and may contain segments unsuitable for evaluation, such as material that is entirely musical or graphical in nature and which contains no lyrics or narration, or material that

contains unintelligible audio such as multiple simultaneous voices. Such unsuitable segments should not be included in the total running time of the representative sample, and should not be evaluated for quality.

If the captions for an entire program are in compliance with quality specifications except for a continuous segment of the program that represents no more than 10% of the total broadcast length, then the program should be considered in compliance and the problematic segment shall be considered an anomaly.

4) Mitigating Factors

Many factors affect the ability of the captioner to create accurate, timely, and complete captions. For both prerecorded and live captioning, these factors include the clarity of the audio and the speed of the speech or narration. The realtime captioner faces additional challenges based on the technical nature of the content, the ability of the captioner to anticipate what will be said, and other variables. If there is any doubt as to a program's compliance (or non-compliance) with quality specifications, AMIC recommends that an expert in the field of captioning review the subject captioning before a final determination of quality is made.

D. Answering the Commission's Questions in the NPRM

- 1) The Commission asks for information on the current status of its rules in making video programming accessible. AMIC believes that the absence of a clear and objective definition of what it means to be "captioned," as noted above, has led to inconsistent quality of captioning, and that intentionally or not, Video Programming Distributors (VPD's) have occasionally skirted the spirit of the existing FCC rules. The statement in the rules that "captions must provide

information substantially equivalent” to the audio has proven to be an inadequate definition because it can be and has been so broadly interpreted.

- 2) In Paragraph 13 of the NPRM, the Commission asks whether it should set standards for the non-technical quality of captioning and, if so, what issues it should consider. AMIC believes very strongly that such standards are necessary to ensure the full accessibility intended by the Congress in the Telecommunications Act of 1996. The NPRM has correctly identified the factors that must be considered in making a determination of captioning quality, though we would exempt two of those factors for the purpose of any rulemaking on caption quality. First, we wish to note that the issue of type font is beyond the control of the captioners or VPD’s because of the flexibility appropriately allowed in the Commission’s rules implementing the Television Decoder Circuitry Act of 1990. AMIC would also contend that caption placement is a matter of stylistic difference, and that there is a lack of empirical data that would allow the Commission to establish rules for placement other than to note that screen placement of captions is one method by which it is possible to identify who spoke the words in the caption.
- 3) Also in Paragraph 13, the Commission asks what would constitute an “error.” AMIC believes that such a list should include not only what constitutes an error in each of the three main quality components – completeness, timeliness, and accuracy – but also the number of errors acceptable – tolerances, if you will – for live and prerecorded captioning. See Section 3.D.6 below for recommended tolerances for completeness and accuracy.

In terms of timeliness, AMIC recommends that for prerecorded captions, a program should be considered out of compliance if there is more than one sentence (or portion of a sentence) in any half hour

of programming in which a word appears in a caption more than five seconds after the word was spoken. For live captions, a program should be considered out of compliance if there are more than two instances in each half hour of programming when a sentence (or portion of a sentence) is delayed more than 8 seconds at the consumer's receiver.

- 4) In Paragraph 14, the Commission seeks information on the cost of imposing non-technical standards and whether there are enough competent captioners to meet such a mandate. AMIC's contention is that there has never been a shortage of qualified captioners for prerecorded programs, and that we do not anticipate any widespread shortage of qualified steno-based realtime captioners to meet the demand. There are, however, hazards that could impact the supply in a negative way. A shortage could ensue if VPD's insist on using realtime captioning for programs that could and should be captioned using offline techniques. In addition, the industry cannot sustain further erosion of the prices that VPD's are willing to pay. Margins for live captioning are virtually non-existent at today's prices. The highly skilled people who do realtime captioning have alternative markets for their skills, primarily in the lucrative free-lance court reporting industry. The supply of skilled labor could be reduced if service providers cannot continue to afford their services.
- 5) Also in Paragraph 14 is a question about the costs to programmers and distributors of non-technical quality standards. AMIC believes it is impossible to predict how as-yet-unknown rules might affect a market that has never faced such rules. We would point out, however, that there is a great cost to consumers in terms of access to critical information contained in news, public affairs, and emergency information programs if no such rules are forthcoming. There is no reason to expect that the marketplace will respond to quality standards by unfairly raising prices.

- 6) Paragraph 15 of the NPRM (which mistakenly is labeled as referring only to “Pre-produced programs”) asks whether it would be appropriate for no more than 0.2% (for prerecorded) and 3.0% (for live) of the spoken words to be “wrong, misspelled, or absent” in the captions. AMIC supports this concept as being the most reasonable and efficient manner of tracking and quantifying both completeness and accuracy. We support the average rate of 0.2% for prerecorded programs, but we believe the appropriate average error rate for live captioning is 5.0%. In both cases, the evaluation of what is “absent” and in error should take into account the mitigating factors listed above in Section 3.C.4 and the complexities delineated in Section 3.C.2.i.c, and should omit unsuitable samples as described above in Section 3.C.3. Note that if a single spoken word is mistakenly typed as two or more words, it should count as only one error.
- 7) AMIC agrees with TDI’s contention, noted in Paragraph 16 of the NPRM, that programs that fail to meet any FCC quality standards should not be counted as captioned, as we have stated above in Section 3.B.
- 8) In Paragraph 25, the Commission seeks comment on VPD’s responsibility to monitor captioning transmissions. We wish to point out that it is technically and logistically impossible for AMIC’s member companies, a group that provides over 95% of the captioning seen in America, to monitor and ensure that captions are delivered intact to consumers. The captioner can control only what is delivered to the VPD.
- 9) In the NPRM’s Paragraph 35, the Commission seeks comment on a “captioning complaint form.” AMIC wishes to note that effective response to consumer complaints always requires that certain key information be obtained to determine the source of any problem. If even one or two critical bits of information about the complaint are missing, it can be impossible and/or very time consuming to find and

fix a problem. This information includes exact time and date of the problem, the program involved, the source of the signal received by the consumer, data about the consumer's equipment, and, of course, as detailed as possible a description of how the problem manifested itself.

- 10) The Commission asks in Paragraph 48 about the use of ENT (Electronic Newsroom Technique) captioning. AMIC supports any technique for captioning as long as the technique being used can produce captions with the same set of completeness and accuracy criteria outlined above. In response to the Commission's questions about captioning costs, AMIC will stipulate that the costs to produce realtime captioning and the prices being charged to VPD's have decreased substantially since the FCC's initial Report and Order mandating the quantity of captioned programming.
- 11) In Paragraph 50 of the NPRM, the Commission seeks comment on the supply of captioners, the number of captioning service providers, and the impact a quality standard might have on the supply of both. AMIC contends, as stated above in Section 3.D.4, that we do not anticipate any widespread shortage of people qualified to create realtime captions, and that there has never been a shortage of captioners capable of doing prerecorded programming. The number of service providers is substantial and growing. In addition to the companies that have been members of AMIC, we are aware of dozens of others, most of them smaller, local companies that provide captioning services.
- 12) Finally, in Paragraph 51, the Commission asks what steps could be taken to encourage individuals to train and become captioners. We assume that the question pertains primarily, if not exclusively, to realtime captioners. AMIC believes that the introduction of quality standards will be a positive step in signaling to prospective trainees that captioning is a significant trade where skill and productivity matter

and are valued. AMIC will continue to work with the National Court Reporters Association (NCRA), and our members will continue to work with trade schools and colleges to attract and provide incentives to young people to enter this field. Other than the promulgation of quality standards, we do not see what steps the FCC can take directly to assist in this endeavor.

4. CONCLUSION

The Accessible Media Industry Coalition believes strongly that the addition of non-technical quality standards to the FCC's rules governing the provision of captioning services is an important and necessary step. The absence of an objective, quantifiable definition of what it means for a program to be "captioned" has sown confusion and inconsistency in the marketplace. Creating standards will go a long way towards ending the abuse identified by the Petitioners. Programs that do not meet quality standards should not be counted as having been captioned in terms of meeting the quantitative mandate. Non-compliant quality should not, however, by itself be cause for sanctions or fines.

The Accessible Media Industry Coalition compliments the Commission on this NPRM and encourages its rapid action and issuance of appropriate new rules.

Respectfully Submitted,

Jeffrey M. Hutchins

Jeffrey M. Hutchins, Chairman
Accessible Media Industry Coalition

APPENDIX A
MEMBERS OF AMIC AS OF NOVEMBER 1, 2005

All Captioning, Inc., Miami, FL
Caption Associates, Lawrence, KS
Caption Colorado, Greenwood Village, CO
Caption Reporters, Upper Marlboro, MD
Caption Solutions, Lawrence, KS
CaptionMax, Minneapolis, MN
Captions, Inc., Burbank, CA
Cinety, Inc., Hollywood, CA
Closed Captioning Services, Grand Rapids, MI
Elrom, Inc., New York, NY
LNS Captioning, Portland, OR
Narrative Television Network, Tulsa, OK
National Captioning Institute, Vienna, VA
Rapidtext, Newport Beach, CA
SoundWriters, Long Island City, NY
U.S. Captioning, DePere, WI
VanKirk Media, Fullerton, CA
Visiontext, Burbank, CA
VITAC, Canonsburg, PA

APPENDIX B

THE 16-CARAT APPROACH TO CAPTIONING QUALITY

Definition: “Captioning is the textual display of soundtrack information of visual media that allows a viewer to follow dialogue and action of a program simultaneously.” In order to achieve this goal successfully, captions should meet the following 16 criteria:

COMPLETE

Programs are captioned from start to finish
Every sentence is conveyed

ACCURATE

Each word is the correct word
Each word is correctly spelled
Each sentence is correctly punctuated

READABLE

Captions display with adequate time to be read completely
Captions are not obscured by the visual content of the program
Every effort should be made to avoid obscuring important textual and visual information
Captions do not compete with other displayed text
Captions are an appropriate size

ANCILLARY

Viewers can tell who spoke the captioned words and when the speaker has changed
Viewers can tell how the words were said, e.g. shouted, whispered, sung
Other auditory cues, such as music and sound effects, are described in the captions

TIMELY

Words do not appear too early
Words do not appear too late
Captions are timed to accompany the audio as closely as possible

RECOMMENDATIONS:

- Captioners should make their best effort to obtain the *final* copy of a program or information about its final version;
- Captioners should be sensitive to the tone of the soundtrack, noting all essential non-verbal information that is conveyed, such as sarcasm, silence, musical moods, and background sounds;
- Realtime systems that lag far behind the audio should not be used.