Managing the New Closed Captioning Rules

November 29, 2005 by Paul J. Elliott

Television station managers and news directors will be facing new closed captioning requirements that will quicken the pace of technological development and move broadcasting ever closer to the digital era. Congress and the Federal Communications Commission are committed to imposing regulations that will ensure that closed captioning requirements will apply to digital broadcasting. However, the National Association of Broadcasters and other industry groups have been reluctant to embrace the technological possibilities that have the potential effect on one in 12 Americans.

"Closed captions provide a critical link to news, entertainment, and information for individuals who are deaf and hard of hearing, enabling these individuals to be part of the cultural mainstream of our society" (FCC, 2005). In the Telecommunications Act of 1996, congress required the FCC to "prescribe rules and implementation schedules for closed captioning of television video programs" (Timeline 2005).

Closed captioning in not just an incidental part of the transition to digital broadcasting, but a vital part of extending digital services to a large segment of the population. According to the 1990 and 1991 Health Interview Surveys of the National Center for Health Statistics, approximately 20 million persons, or 8.6 percent of the total

U.S. population 3 years and older, were reported to have hearing problems. The elderly are more likely than others to have hearing.

New FCC requirements

All new non-exempt television programming will be required to be closed-captioned beginning January 1, 2006. This applies to both digital and current analog televisions produced in English. Over the next six years, these rules will extend to Spanish-language programming. These closed captioning requirements are being adopted to coincide with the proposed transition to digital broadcasting.

The new Federal Communications Commission rules will also require that local newscasts of network-affiliated stations in the top 25 markets must also be captioned, and is seeking to extend in time those rules to small and medium-sized markets over the objections of the National Association of Broadcasting. In its efforts to provide services for the hearing impaired, breaking news and emergency alerts, the FCC rules that kind of information must also be accessible by other means that technology can provide. Current FCC rules do not require closed captioning for emergency information but does require some sort of "visual presentation, including, but not limited to, open captioning, crawls and scrolls" (Wiley, March 2005).

Some programming is exempt from the FCC requirements: most programs airing between 2 and 6 a.m.; local non-news non-repeat programming; commercials but not infomercials longer than five minutes; public television station-produced informational programming; any programs in languages other than English or Spanish; programs on

new networks up to four years; and public service announcements and other short promotional announcements, except for federally-funded spots; and programming from providers with annual gross revenues less than \$3 million.

In cases where a video programmer or distributor believes that adding captions to programming "would result in an undue burden," they may file for an FCC exemption (Jones, 2005).

In comments to the FCC, The National Association of Broadcasters contends "that many of the proposed regulations will do little to improve captioning quality because they do not comport with current realities" (NAB, 2005, p.3). The NAB argues that certain proposed regulations work against more developing more cost-effective methods captioning, including voice-recognition and other technologies.

The NAB said that "compliance regulations cannot overcome the practical burdens broadcasters face" The NAB holds the position that these regulations "would place both unreasonable burdens and unachievable goals on broadcasters, particularly on medium and small market television stations who are struggling with declining news revenues and costs associated with converting to digital television." (NAB, 2005, p. 4).

The FCC's decision to require real time captioning for news programs on major stations is significant because it recognizes the importance of access to news programming. FCC rules once allowed networks to use their own form of captioning called "electronic newsroom captioning" (ENR) when broadcasting live. Stations could

enter ENR captions into news TelePrompTers. However, the NAD successfully argued that ENR "does not provide full access because it does not caption live interviews, field reports, sports and weather updates, school closings, and other late breaking stories which are not pre-scripted" (NAD, 1998).

The NAB argued that the FCC should also not extend the 1998 prohibition on using Electronic Newsroom Technique (ENT) to caption news beyond the top 25 markets. Again, citing the burden of imposing additional costs to small and medium-sized local broadcasters, who already are facing the costs of transitioning to digital television, the NAB commented the additional regulations could result in less news coverage (NAB, 2005, p. 10). It is estimated that the transition to digital television is costing stations from \$1-2 million on average (Papper, 2005). And during the transition, the dual transmission of both the analog and television signals are increasing monthly utility costs of over \$10,000. (NAB, 2005, p. 22).

As the transition to digital broadcasting is completed those additional utility costs will be eliminated, and the capital improvement costs will even out.

Another issue that concerns the NAB is that broadcasters should be responsible for damaged caption delivered by content providers caused during the editing process. "The occasional failure of the producer to supply captioned material should not result in the station's having failed to meet their captioning responsibilities" (NAB, 2005, p. 19). The NAB said that since most programming airing on local broadcast television stations is not produced locally and is often obtained from third parties, the FCC should not be placing a regulatory obligation on the stations, but rather on the producers of captioned content, more in line with what Congress intended, according to the NAB.

The NAB has also commented against FCC rules prescribing standards on fonts and texts, although the FCC has given great latitude to equipment manufacturers and broadcasters. The Commission's main concern is over "readability" issues when it comes to broadcasting enhanced fonts onto older analog televisions.

Advocates for the deaf

The National Association of the Deaf views closed captioning as the right to equal access:

"Closed captioning is an integral and crucial part of a deaf and hard of hearing person's daily life and personal safety. However, despite the FCC current closed captioning rules, there continues to be woeful captioning access -- no access or poor quality -- in broadcast captions" (NAD, 2005).

The NAD seeks to have all television programming is to be closed-captioned 24 hours a day, seven days a week, regardless of program content or other conditions. The NAD advocates for "live programming such as talk shows or news broadcasts... to be captioned by means of real-time captioning technology." (NAD, 2005). The group also wants local stations to be aware that text messages superimposed on the screen for emergency broadcasts or weather alerts should not interfere with the closed captioning portion of programming.

The history of closed captioning extends back to 1976 when the FCC adopted the rules that provided for the transmission of closed captioning. Three years later the National Captioning Institute was founded to implement the standards for broadcasting of text messages over the television. By the following year, only a few programs carried closed captioning to the handful of viewers who had purchased the set-top decoders. It

wasn't until 1990 that Congress passed the Television Decoder Circuitry Act, which required all televisions with 13" and larger screens to be able to receive closed captioning beginning in 1993.

In 1990 passed into law the Television Decoder Circuitry Act (47 U.S.C. §§ 303(u), 330 (b)), requiring most televisions to be able to decode and display closed captioning. With the development of digital television, the FCC was required to update its rules so that closed captioning service could continue. Digital television technology presents some opportunities for displaying data text on screen not currently available on today's analog television screens. The transition to digital television also presents some technical hurdles for manufacturers to overcome.

The FCC amended Part 15 to adopt technical standards for closed captioning for closed captioning displays for digital television. The FCC also set a compliance date of July 1, 2002 for new closed caption programming, and January 1, 2006 for all nonexempt programming.

The FCC did not specify or dictate how digital television would incorporate closed captioning, but left that up a trade group to decide. After the FCC updated its rules, the Electronic Industries Alliance adopted a standard to provide guidelines to manufacturers and caption providers.

The FCC order adopted the industry standard of Section 9 of EIA-708. This new digital standard sets requirements for fonts, colors, services and settings for all digital televisions with 13 inch or greater screens (7.8 inches when measured vertically on widescreen sets), all DTV tuners and equipment that pass through the caption signals, such as video recorders.

The FCC also took a look at third-party equipment. The new decoder requirements are not just limited to televisions but include tuners and set-top converter boxes. During the transition to digital broadcasting, it is expected that consumers will be buying set-top boxes for the analog televisions they already own. Therefore, the FCC chose to require these converter devices to conform to the Act over the objections of manufacturers such as Thomson Consumer Electronics Inc., which questioned the Commission's authority in this matter. These new converters are also required to keep the ability to pass through the analog caption signals as mandated under EIA-608 currently in effect.

The main technical obstacle in converting digital captioning to analog television is that not all digital signals will display correctly because of the difference in bandwidth. That is why Section 9 addresses the need for minimum requirements.

With regard to DVD players, VCRs and personal video recorders like TiVO that can be attached to the television, the Commission made no new requirements except to maintain that all such devices be able to pass through the digital caption signals, but they do not have to decode the signal.

Advocacy groups representing the hearing impaired support more than the basic requirements of Section 9. They would like to see the full implementation of all that digital television can offer, including user control of displayed text.

Manufacturers contend that this approach exceeds what the law requires, and thus the FCC's authority. They also cite the higher costs of digital enhancements mandated by the FCC order.

Overcoming technological hurdles

By passing the TDCA, Congress aimed to extend the benefits of technology to the hearing impaired, older people with some hearing loss as well as those with some visual disability. Digital television captioning allows users to select font styles, sizes and colors to meet their preference or need. Changing caption settings also helps children and adults with their literary skills. Individual settings can be especially useful for young children learning to read.

Even when Congress passed the TDCA, technology was already available for the conversion to digital television. The FCC contends the TDCA enables it to make closed captioning rules for digital television that are consistent with the Act's intent of universal accessibility. Disagreeing with the adoption of Section 9 of EIA-708 was the NAB. The National Association of Broadcasters had requested the adoption of the Program and System Information Protocol (PSIP) data stream currently used in DTV broadcasting and supported by the Advanced Television Systems Committee (ATSC), which developed the PSIP standard (A/65).

The NAB argues that DTV closed captioning should be dependent on the decoding of PSIP data. The FCC ruled that since PSIP data is already being used on a voluntary basis by some manufacturers, there was no need to make it a requirement as the NAB requested. The PSIS data stream is being used currently for displaying content rating information on V-chip enabled televisions.

Conclusions

Despite continued resistance from broadcasters to fully embrace closed captioning in the face of new FCC regulations during a time of costly transition to digital

broadcasting, Americans facing hearing disabilities will see expanded captioned programming beginning in 2006. Broadcast station managers should be familiar with these new FCC rules and ensure they are in compliance by looking at the breadth of video and live programming. News directors should make sure that their newscasts are in compliance as well.

Compliance is not simply a costly, time consuming burden on stations, but rather an opportunity to reach out to more viewers. With over 20 million Americans having some level of hearing impairment, this is a demographic that wants its voice to be heard.

Several advocacy groups for the deaf and hearing impaired, including the

National Association of the Deaf, contribute their voices to shaping FCC policy and rules, often in opposition to the positions taken by the National Association of Broadcasters. If the transition to digital television broadcasting is to be successful, the NAB should work closely with these groups, communicate their concerns over technological standards, financial burdens and work to make this transition one that will serve Americans well.

Bibliography

- Demographic aspects of hearing impairment. National Center for Health Statistics. Data from the National Health Interview Survey. Retrieved November 29, 2005 from http://gri.gallaudet.edu/Demographics/factsheet.html#Q1
- Federal Communications Commission. Closed captioning: consumer facts. Retrieved

 November 29, 2005 from http://www.fcc.gov/cgb/consumerfacts/
 closedcaption.html
- Jones, G. (2004). Implementing Closed Captioning for DTV. National Association of Broadcasters Broadcast Engineering Conference Proceedings 2004. Retrieved November 29, 2005, from http://www.atsc.org/
 news_information/papers/2004/Implementing_Closed_Captioning.pdf.
- Kirby, K. (2005). Making Emergency Info Accessible to All. Legal Notes.

 Communicator (March). Washington: Radio and Television News Directors Association.
- Kirby, K. (2005). Closed-Captioning Deadline Is January 1, 2006. Legal Notes.

 Communicator (May). Washington: Radio and Television News Directors

 *Association.
- National Association of Broadcasters (2005). Comments on Closed Captioning of Video

 Programming. Retrieved November 29, 2005 from http://www.nab.org/

 Newsroom/PressRel/Filings/ClosedCaptioningComs111005.pdf
- National Association of the Deaf. Position Statement on Television Access (2005).

 Retrieved November 29, 2005 from http://www.nad.org/site/

pp.asp?c=foINKQMBF&b=100785

NAD achieves important captioning victory. Petition brings about changes in FCC rules (1998). Retrieved November 29, 2005 from http://www.nad.org/site/pp.asp?

c=foINKQMBF&b=178013

Papper, B. (2005). News, Staffing and Profitability Survey, *Communicator*. (October). Washington: Radio and Television News Directors Association.

Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat. 56 (1996).

Television Decoder Circuitry Act of 1990, Pub. LA No. 101-431 (1990).

Timeline of Closed Captioning Development. Retrieved from Federal Communications

Commission website Nov. 28, 2005. http://ftp.fcc.gov/cgb/dro/cctimeline.htm