

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

DISPATCH UNIT
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FOO MAIL SECTION

In the Matter of)
)
Closed Captioning and Video Description) MM Docket No. 95-176
of Video Programming)

NOTICE OF INQUIRY

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By the Commission:

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I. INTRODUCTION

1. There are over 23 million Americans with hearing disabilities and over 8 million Americans with visual disabilities.¹ For years these individuals have not been able to enjoy fully television programming, a medium that has come to play a dominant role in the nation's culture. Over the past 15-20 years, however, two innovations have been developed to offer

¹ See U.S. Dep't of Commerce, Economics and Statistics Admin., Bureau of the Census, *Statistical Abstract of the United States* 140 (114th ed. 1994)

greater access to this important medium for people with hearing and visual disabilities. Closed captioning -- the visual display of program material that is spoken on television -- makes "it possible for the deaf and hard of hearing to see what they cannot hear."² Video description -- a more recent innovation that involves the insertion of narrative descriptions of a television program's key visual elements into natural pauses between the program's dialogue -- makes it possible for individuals who are blind or have low vision "to hear what they cannot see."³

2. We initiate this inquiry to assess the current availability, cost, and uses of closed captioning and video description, and to assess what further Commission actions may be appropriate to promote these services. We also seek comment on the appropriate means of promoting their wider use in programming delivered by television broadcasters, cable operators, and other video programming providers. Both Congress and the Commission have taken steps over the years to provide persons with disabilities with greater access to television programming.⁴ Indeed, there is legislation currently pending before Congress that, if enacted, would for the first time generally mandate the closed captioning of video programming, and which would require the Commission to study the uses of video description and the appropriate means of making video programming accessible to persons with visual disabilities. This *Notice of Inquiry* is intended to solicit information regarding these important issues and to determine how to make television programming accessible to all Americans.

II. BACKGROUND

3. *Closed Captioning.* Captioning is similar to subtitles in that it displays the audio portion of a television signal as printed words on the television screen.⁵ To assist viewers who are hearing disabled, captions also identify speakers, sound effects, music, and laughter.

² *Telecommunications Reform, Hearings on S. 1822 Before the Senate Committee on Commerce, Science and Transportation*, 103rd Cong., 2d Sess. (May 24, 1994) (statement of Margaret R. Pfanstiehl, President of The Metropolitan Washington Ear) (available on Westlaw: 1994 WL 235685) ("Pfanstiehl Statement").

³ *Id.*

⁴ See *infra* at ¶¶ 4-5.

⁵ See *Implementation of Television Decoder Circuitry Act*, 6 FCC Rcd 2419, 2420 (1991) ("*TDCA R&O*"), *recon. granted in part*, 7 FCC Rcd 2279 (1992). Further background information concerning closed captioning can be found in DuBow, "The Television Decoder Circuitry Act -- TV For All," 64 Temp. L. Rev. 609 (1991), and on the World Wide Web home page of the Caption Center of the WGBH Educational Foundation ("*WGBH*"): <http://www.wgbh.org/Pages/CaptionCenter/CaptionCenterHome.html>. Copies of materials from the World Wide Web that are cited in this *Notice of Inquiry* will be placed in the record of this proceeding.

Captions were first used in the early 1970s in an "open" format, transmitted with the visible video picture so that they appeared to all viewers. To minimize objections to captioning, the Public Broadcasting Service ("PBS") developed closed captioning in the 1970s. Closed captioning is hidden as encoded data transmitted within the vertical blanking interval of the television signal.⁶ A viewer wishing to see the closed captioning must use a set-top decoder with his or her television or a television with built-in decoder circuitry.

4. The Commission has long sought to promote closed captioning technology. In the 1970s, the Commission granted PBS a number of authorizations to conduct experimental transmissions using closed captioning, and in 1976, adopted rules that provide that line 21 of the vertical blanking interval is to be primarily used for the transmission of closed captioning.⁷ To implement the Television Decoder Circuitry Act of 1990 ("TDCA"),⁸ the Commission adopted regulations requiring all television broadcast receivers with screen sizes 13 inches or larger that were manufactured or imported on or after July 1, 1993 to be capable of receiving and displaying closed captions.⁹ These rules specify technical standards for the reception and display of such captioning.¹⁰ The Commission has also adopted technical standards for the cable carriage of closed captioning data that accompanies programming carried on cable systems.¹¹

5. In addition to these efforts to promote closed captioning technology, in 1976, the

⁶ See 47 C.F.R. § 73.682(a)(22). In particular, closed-captioning information may be transmitted on fields one and two of line 21 of the vertical blanking interval. Standard television pictures are transmitted at a rate of 30 frames per second, with two interlaced fields comprising each frame. Each field begins with a vertical blanking interval of twenty-one lines, during which the picture scanning beam is turned off (blanked) and is moved from the bottom of the screen to its starting position at the top of the screen. Thus, there are two vertical blanking intervals transmitted per frame, one in each field. The placement of data within the vertical blanking interval is described in terms of the particular blanking line used and the field (one or two) in which it occurs. See *Permissible Uses of the Vertical Blanking Interval*, 8 FCC Rcd 90 n.1 (1992).

⁷ See *Captioning for the Deaf*, 63 FCC 2d 378 (1976). See also *Permissible Uses of the Vertical Blanking Interval*, 8 FCC Rcd 3613 (permitting enhanced closed-captioning and other broadcast-related information services on line 21, field 2 of the vertical blanking interval).

⁸ Pub. L. No. 101-431, 104 Stat. 960 (1990) (codified at 47 U.S.C. §§ 303(u), 330(b)).

⁹ 47 C.F.R. § 15.119; *Implementation of the Television Decoder Circuitry Act*, 6 FCC Rcd 2419.

¹⁰ *Id.*

¹¹ 47 C.F.R. § 76.606; *Cable Television Technical and Operational Requirements*, 7 FCC Rcd 2021, 2031 (1992), *recon. granted in part*, 7 FCC Rcd 8676 (1992). See also 47 U.S.C. §§ 534(b)(3), 535(g)(1) (cable operators' must carry obligations include carriage of "line 21 closed caption transmission").

Commission adopted a rule requiring television licensees to transmit emergency messages in a visual format.¹² In 1992, Congress passed the Americans with Disabilities Act ("ADA") which requires all federally funded public service announcements to be closed captioned.¹³ Aside from these requirements, however, neither Congress nor the Commission has mandated captioning of television programming. Instead, Congress and the Commission have relied on the voluntary efforts of program producers and providers to make television programming accessible to persons with hearing disabilities. As far back as 1970, the Commission has urged broadcast television licensees to undertake these voluntary efforts.¹⁴ We have also "strongly encourage[d] cable operators to carry more closed-captioned video programming."¹⁵ With our prompting has come the admonition that we would consider requiring specific action if voluntary efforts proved unsuccessful.¹⁶

¹² 47 C.F.R. § 73.1250(h); *Emergency Messages -- Television*, 61 FCC 2d 18 (1976), *recon. granted in part*, 62 FCC 2d 565 (1977).

¹³ 47 U.S.C. § 611. The ADA is a comprehensive civil rights statute that prohibits discrimination against individuals with disabilities in the areas of employment, state and local government services, and in private places of public accommodation such as restaurants, law offices, and movie theaters. *See generally* Burgdorf, "The Americans with Disabilities Act: Analysis and Implications of a Second-Generation Civil Rights Statute," 26 Harv. C.R.-C.L. L. Rev. 413 (1991). In addition to requiring the closed captioning of federally funded public service announcements, Title IV of the ADA amended the Communications Act of 1934 to require common carriers offering telephone voice transmission services to provide telecommunications relay services for individuals with hearing and speech disabilities. 47 U.S.C. § 225. The Commission has adopted regulations implementing this requirement. *See* 47 C.F.R. §§ 64.601 - 64.608.

¹⁴ *The Use of Telecasts to Inform and Alert Viewers With Impaired Hearing*, 26 FCC 2d 917 (1970) (alerting television licensees of the special needs of persons with hearing disabilities, and urging them to make use of visual as well as oral announcements of emergencies, position newscasters so as to permit the use of lip reading by viewers, and feature visualization of materials in news, weather, and sports programs). *See also* *Captioning for the Deaf*, 63 FCC 2d at 389 ("We continue to encourage broadcast licensees . . . to make television a truly valuable medium for the hearing-impaired."); *Renewal Applications -- Los Angeles*, 69 FCC 2d 451, 459 (1978) (rejecting renewal challenges based on licensees' failure to provide closed captioning, but "urg[ing] all television licensees to review the options presently available that, within reason, might provide some of the benefits of the medium of television for this nation's hearing impaired"), *recon. denied*, 72 FCC 2d 273 (1979), *aff'd sub nom. Community Television of Southern California v. Gottfried*, 459 U.S. 498 (1983).

¹⁵ *Implementation of 1992 Cable Act Rate Regulation*, 8 FCC Rcd 5631, 5902 (1993).

¹⁶ *See The Use of Telecasts to Inform and Alert Viewers With Impaired Hearing*, 26 FCC 2d at 918-19 ("We will observe developments in this area in the near future, and if the situation does not develop satisfactorily it may be necessary to begin rule making looking toward the adoption of minimum requirements."); *Renewal Applications - Los Angeles*, 72 FCC 2d at 281 (if closed captioning efforts prove unsuccessful, "it may be necessary for the Commission to determine if a

6. *Video Description.* Video description is a more recent innovation. It provides audio descriptions of a program's key visual elements that are inserted during the natural pauses in the program's dialogue. It was first used in theatrical performances in the early 1980s, and since that time has been developed for television programming by WGBH and others.¹⁷ The video description of a television program is transmitted via the Second Audio Program channel. This ancillary service is permitted under the Commission's rules so long as it causes no observable degradation to any portion of the visual or aural broadcast signal.¹⁸ To receive the service, the audience member must have a stereo television or a video cassette recorder ("VCR") that is capable of receiving the Second Audio Program channel, or a television adapter for this channel. There are presently no FCC requirements regarding video description.

7. *Pending Legislation.* Both the Senate and the House of Representatives have passed bills, which, if enacted, would require the Commission to adopt regulations to ensure that video programming is accessible to persons with hearing disabilities through the provision of closed captioning, including requiring "video programming providers or owners" to maximize the accessibility of previously published or exhibited programs by adding closed captioning.¹⁹ Both bills would allow the Commission to exempt programs from these requirements in certain circumstances, including circumstances where the closed captioning would impose an unreasonable financial burden.²⁰ The House bill would require the Commission to conduct an inquiry into the current extent of closed captioning as well as other issues.²¹

8. In addition, both bills would require the Commission to study the use of video

rulemaking is warranted to ensure that the hearing impaired are not deprived of the benefits of television").

¹⁷ See Pfanstiehl Statement, *supra* note 1. WGBH has established the Descriptive Video Service to provide video description. See WGBH World Wide Web home page: <http://www.wgbh.org/Pages/DVS/DVSHome.html>.

¹⁸ See 47 C.F.R. §§ 73.682(a)(23)(ii); 73.646.

¹⁹ H.R. 1555, 104th Cong., 2d Sess. § 204 (1995); S. 652, 104th Cong., 2d Sess. § 308 (1995).

²⁰ See *infra* at ¶ 28.

²¹ See H.R. 1555, *supra* note 19, at § 204(a) (The FCC shall "ascertain the level at which video programming is closed captioned. Such inquiry shall examine the extent to which existing or previously published programming is closed captioned, the size of the video programming provider or programming owner providing closed captioning, the size of the market served, the relative audience shares achieved, or any other related factors.").

description.²² The House bill further provides that the Commission "may adopt regulation it deems necessary to promote the accessibility of video programming to persons with visual impairments."²³

III. THE PUBLIC INTEREST BENEFITS OF CLOSED CAPTIONING AND VIDEO DESCRIPTION

9. Providing persons with disabilities access to the "tremendously powerful television medium" serves an important public interest.²⁴ A recent study attests to the dominant role television plays in our society. It reports that nine in ten Americans watch television on a regular basis.²⁵ American households spend an average of over seven hours every day watching television as a means of entertainment and relaxation and as a source of news and information.²⁶ Most Americans depend on television to get their news: 72 percent of Americans list it as their primary news source.²⁷

10. Closed captioning allows persons with hearing disabilities to enjoy fully the world of television. Indeed, the Commission on the Education of the Deaf has stated that "captioning of TV . . . is the most significant technological development for persons who are deaf."²⁸ In enacting the TDCA, Congress found that "closed-captioned television transmissions have made it possible for thousands of deaf and hearing-impaired people to gain

²² See H.R. 1555, *supra* note 19, at § 204(f) (requiring the FCC to "assess appropriate methods and schedules for phasing video descriptions into the marketplace, technical and quality standards for video descriptions, a definition of programming for which video descriptions would apply, and other technical and legal issues that the Commission deems appropriate"); S. 652, *supra* note 19, at § 308(b) (requiring a "study of the feasibility of requiring the use of video descriptions on video programming in order to ensure the accessibility of video programming to individuals with visual impairments").

²³ H.R. 1555, *supra* note 19, at § 204(f).

²⁴ *The Use of Telecasts to Inform and Alert Viewers With Impaired Hearing*, 26 FCC 2d at 918. See also *Captioning for the Deaf*, 63 FCC 2d at 388 ("[W]e believe it is of the utmost importance that the hearing-impaired, a significant portion of our population, enjoy the tremendously powerful television medium.").

²⁵ Roper Starch Worldwide, *America's Watching: Public Attitudes Toward Television 3* (1995) ("*Roper Study*"). A copy of this study will be placed in the record of this proceeding.

²⁶ *Id.* at 6; *Information Please Almanac* 744 (48th ed. 1995).

²⁷ *Roper Study* at 17.

²⁸ See H.R. Rep. No. 767, 101st Cong., 2d Sess. 4 (1990) (legislative history of TDCA).

access to the television medium, thus significantly improving the quality of their lives."²⁹ Video description similarly provides access to persons with vision disabilities, and also furthers the national goal, as stated in the ADA, "to assure equality of opportunity, full participation, independent living, and economic self-sufficiency" for individuals with disabilities.³⁰ Closed captioning and video description can thus offer great benefits to Americans with hearing and vision disabilities.

11. We ask parties to elaborate on the importance and nature of these benefits. We also ask parties to submit information regarding the number of individuals in this country who can benefit from these innovations, including the basis for such estimates. According to data compiled by the U.S. Census Bureau, there are over 23 million persons with hearing disabilities and over 8 million persons with vision disabilities in this country, although we have seen estimates claiming a larger number of individuals with these disabilities.³¹ We assume the Census Bureau figures reflect an accurate estimate of these populations, but seek comment in this regard. Does the Census Bureau use a narrow definition of vision or hearing disability such that there may be an additional number of Americans with some form of hearing or vision disability who can benefit from closed captioning or video description yet are not included in the Census Bureau figures? Are the number of persons with hearing and vision disabilities expected to grow in the coming years, particularly due to the aging of the population? What proportion of the persons with such disabilities require closed captioning or video description to enjoy television programming, and what proportion currently utilize these technologies? In addition, we seek comment on the number of children with hearing and vision disabilities that can benefit from either closed captioning or video description, and the nature of these benefits.

12. Closed captioning and video description can offer other benefits. Closed captioning can be an effective tool in teaching literacy skills for young children as well as for the estimated 23-27 million American adults who are functionally illiterate.³² It also provides a useful learning aid for the approximately 3-4 million Americans learning English as a second language.³³ Video description may similarly benefit individuals with learning or

²⁹ Section 2(2) of TDCA, Pub. L. 101-431, 104 Stat. 960, 47 U.S.C. § 303 note.

³⁰ Section 2(a)(8) of the ADA, 42 U.S.C. § 12101(a)(8).

³¹ U.S. Dep't of Commerce, Economics and Statistics Admin., Bureau of the Census, *Statistical Abstract of the United States* 140 (114th ed. 1994). *But see* H.R. Rep. No. 767, *supra* note 28, at 5 (referring to "20-40 million deaf and hearing-impaired population").

³² H.R. Rep. No. 767, *supra* note 28, at 5; DuBow, *The Television Decoder Circuitry Act -- TV For All*, 64 Temp. L. Rev. at 614.

³³ *Id.* According to one commentator, 40 percent of the 60,000 captioning decoders sold in 1989 were to people for whom English is a second language. DuBow, *The Television Decoder Circuitry Act -- TV For All*, 64 Temp. L. Rev. at 614.

cognitive disabilities.³⁴ Finally, closed captioning and video description may provide a convenient feature for all viewers; closed captioning, for example, can be activated when the mute button on the television receiver is depressed or when noise levels in the viewing environment impede normal hearing (e.g., airport terminals, hotel lobbies, waiting rooms). We seek comment on the nature and extent of each of these potential benefits, including the most up-to-date data on the number of individuals who would utilize closed captioning and video description for these purposes.

IV. AVAILABILITY OF CLOSED CAPTIONING AND VIDEO DESCRIPTION

13. *Closed Captioning.* The information available to us indicates that approximately 70 percent of broadcast network programming is closed captioned, including nearly 100 percent of broadcast network prime-time programming.³⁵ Nearly 100 percent of nationally broadcast public television programming is closed captioned.³⁶ Cable programming appears to have far less closed captioning. Only about 4 percent of basic cable programming and 35 percent of premium cable programming is captioned.³⁷

14. We ask commenters to provide data regarding the current availability of closed captioning of television video programming. Has the amount of closed captioning been increasing in recent years, or has it reached a plateau? We are particularly interested in data on availability and any discernible trends regarding the following categories:

- *Program Source.* What is the current availability of closed captioning according to the source of the programming -- broadcast network, basic cable and premium cable networks, syndicated programming, locally-produced programming, local and nationally produced public television programming? What explains the difference in the amount of closed captioning of cable programming as opposed to broadcast programming? We assume that the statistics described in the preceding paragraph regarding the amount of closed captioning of basic cable and premium cable programming excludes the captioned broadcast programming that is carried by cable

³⁴ *Federal Spending, Hearings Before the Subcommittee on Labor, Health and Human Services, and Education, House Committee on Appropriations, 104th Cong., 1st Sess. (Jan. 19, 1995) (statement of Oral Miller, National Representative, American Council of the Blind) (available on Westlaw: 1995 WL 20724).*

³⁵ See H.R. Rep. No. 628, 102d Cong., 2d Sess. 93 (1992) (legislative history of Cable Television Consumer Protection and Competition Act of 1992); DuBow, *The Television Decoder Circuitry Act -- TV For All*, 64 Temp. L. Rev. at 611.

³⁶ *Id.*

³⁷ *Id.*

systems. What is the percentage of cable programming that is captioned when such broadcast programming is included, including the broadcast programming cable systems provide their subscribers under their must carry obligations?³⁸ In addition, for comparative purposes, we seek comment on the percentage of home videos that carry closed captioning.

- *Other Delivery Systems.* Viewers can receive television video programming from a variety of non-broadcast, non-cable services, including wireless cable, satellite master antenna ("SMATV") systems, direct-to-home satellite services (including direct broadcast satellite), and local exchange carriers/video dialtone services.³⁹ Much of the programming delivered by these providers currently is obtained from broadcasters, cable networks, and other program producers and distributors. Do these non-broadcast, non-cable providers transmit intact the closed captioning they receive with programming they obtain from outside sources? Is there a need for technical standards for these services to ensure that this is the case, similar to the standards the Commission has adopted for cable systems?⁴⁰ To the extent these alternative providers produce their own programming, what amount of such programming is closed captioned?
- *Program Type.* To what extent are each of the following types of programs closed captioned (on the media within the scope of FCC jurisdiction): entertainment programs, local and national news, documentaries, public affairs programming, children's educational programming, other types of children's programming, sports, movies, cable public access programming, and live vs. pre-recorded programming?
- *Previously Published Programming.* We solicit comment on the extent of closed captioning of previously published or exhibited programs, such as reruns and movies, that will be shown to television audiences again. Are there particular types of previously published or exhibited programs that are more or less likely to be closed captioned? Is there a particular point during the past 10-15 years when closed captioning of such programs generally became more prevalent?
- *Market Size and Other Factors.* We also request comment on the degree to which closed captioning varies by the size (measured in terms of revenue and any other relevant factors) of the video programming provider or producer. In addition, we seek comment on whether providers in smaller television markets are less likely to caption locally originated programming or contribute to the captioning of other types

³⁸ See 47 U.S.C. §§ 534 - 535.

³⁹ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, 10 FCC Rcd 7805 (1995).

⁴⁰ See *supra* note 11.

of programming. Finally, what is the relative amount of captioning on independent television stations and cable systems not affiliated with a multiple system operator?

15. *Video Description.* Video description is available on a number of PBS programs, including *Mystery!*, *Nature*, *The American Experience*, *National Geographic* specials, and some episodes of *Mister Rogers' Neighborhood*.⁴¹ According to the May 1994 Congressional testimony of one disabilities expert, this service is transmitted via the Second Audio Program channel by nearly 100 noncommercial television stations in 29 states covering 64 percent of U.S. television households.⁴² In addition, the Narrated Television Network ("NTN") is a cable network that broadcasts approximately 20 hours of video described movies each week to over 1000 outlets covering over 25 million households.⁴³

16. We seek comment on the current availability of video description, including its availability within each of the categories described in our discussion of the availability of closed captioning. Is this service confined to certain PBS programs and movies carried on NTN? Are there efforts by other video programming providers and producers to provide video description or at least experiment with this service? Are there particular program types that are more likely to carry video description, and, if so, why? To what extent are live programs video described?⁴⁴ We also request comment on the estimated number of U.S. households that have stereo television receivers, a VCR, or television adaptor capable of receiving the Second Audio Program channel, and thus are able to receive video description when it is available.

17. *The Impact of Digital Television.* We also ask parties to comment on the impact that implementation of Advanced Television ("ATV"), and the use of digital technology, may have on the provision of closed captioning and video description on video programming carried by broadcasters and other program providers. Can this new technology facilitate the transmission of closed captioning or video description? Will it be possible to transmit over a digital signal closed captioning or video description data that is encoded in programming

⁴¹ See WGBH World Wide Web home page: <http://www.wgbh.org/Pages/DVS/DVSBrochure.html>. The video description for these programs is provided by WGBH's Descriptive Video Service.

⁴² *Telecommunications Reform, Hearings on S. 1822 Before the Committee on Commerce, Science and Transportation*, 103rd Cong., 2d Sess. (May 24, 1994) (Testimony of Paul W. Schroeder, Co-Chair, Consortium for Citizens with Disabilities, Task Force on Telecommunication/Communication Accessibility) ("Schroeder Testimony") (available on Westlaw: 1994 WL 235759).

⁴³ *Id.*

⁴⁴ WGBH's Descriptive Video Service provided live description of PBS's coverage of the 1993 Presidential Inauguration. See WGBH's World Wide Web home page: <http://www.wgbh.org/Pages/DVS/DVSBrochure.html>.

intended for the current analog transmission system? Can digital technology allow broadcasters and other program providers to transmit other types of services that can particularly benefit individuals with vision or hearing disabilities? We seek comment on these and other relevant issues raised by the implementation of digital technology. We note that there is a comprehensive proceeding currently pending before the Commission concerning broadcast ATV.⁴⁵ We have previously stated in that proceeding that the TDCA "and Congressional intent underlying that statute require that closed captioning services continue to be available during the transition from NTSC to ATV and beyond."⁴⁶ We have consequently directed the ATV Advisory Committee, "in recommending an ATV standard, to take proper account of Decoder Act requirements, both as to closed captioning of simulcast or other HDTV program transmissions, and to the general closed captioning capability of ATV receivers."⁴⁷ As we have stated previously, once "an ATV system is selected, we plan to initiate a proceeding to adopt appropriate changes to our closed captioning rules."⁴⁸

V. THE COST OF CLOSED CAPTIONING AND VIDEO DESCRIPTION

18. *Cost Issues.* According to the legislative history of the TDCA, in 1990, it cost roughly \$2,500 and required 20-30 person-hours to close caption a one hour program.⁴⁹ More recent testimony before Congress indicates that the cost of video description runs from \$2,000 to \$5,000 per hour of programming depending on a variety of factors such as program type.⁵⁰ We ask parties to provide information on the current costs of providing closed captioning and video description of new as well as previously published or exhibited television programming. What is the cost of the computer hardware and software, as well encoding and other equipment, necessary for these services? What are the current rates for closed captioning and video description services for both prerecorded and live, "real-time" programming? Are these rates uniform throughout the country? Do the rates vary by program type, the type of delivery system, or other factors? What is the overall cost of providing closed captioning or video description of different types of programs? In addition, we solicit comment on the impact the implementation of digital television may have on the cost of closed captioning and video description.

⁴⁵ See *Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry* in MM Docket No. 87-268, FCC 95-315, released Aug. 9, 1995.

⁴⁶ *Second Report and Order/Further Notice of Proposed Rule Making* in MM Docket No. 87-268, 7 FCC Rcd 3340, 3361 (1992).

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ H.R. Rep. 767, *supra* note 28, at 8.

⁵⁰ Schroeder Testimony, *supra* note 42.

19. *Supply of Closed Captioning and Video Description Services.* We also seek comment on the adequacy of the supply of closed captioning and video description services. There are presently a number of captioning providers, including WGBH's Caption Center, Captions, Inc., Real-Time Captions, Inc., Vitac/Caption America, and the National Captioning Institute.⁵¹ One report indicates that with the TDCA having taken effect, there are now about 60 companies throughout the country that provide captioning services.⁵² There are fewer suppliers of video description services, with WGBH's Descriptive Video Service appearing to be the primary provider of this service.

20. *Funding of Closed Captioning and Video Description.* Captioning and video description are funded by a number of sources, including the federal government, program producers, program providers such as the broadcast networks, PBS and the Corporation for Public Broadcasting ("CPB"), foundations, advertisers, private corporations, and individual contributors.⁵³ We seek comment on the current degree of funding from these and other sources of this funding. We also solicit comment on proposals regarding new funding sources Congress may wish to consider to promote these services, such as matching grant programs, tax incentives, or the use of spectrum auction revenues.

21. In addition, we request parties to provide information on the current and projected future levels of federal funding. Historically, there appears to have been a heavy reliance on federal funding of closed captioning and video description, particularly through U.S. Department of Education grants. The TDCA's legislative history states that "the federal government provides about 40 percent of the funding for captioning programs."⁵⁴ According to information we have obtained from the Department of Education, in 1995, the Department is providing \$7.9 million in federal grants for closed captioning of television programming and \$1.5 million in federal grants for video description of television programming. What impact will any potential federal budget cut-backs have on this funding? In addition, what impact will any potential cut-backs in federal funding of public television and the CPB have on the provision of closed captioning and video description of television programming? Who are the recipients of this federal funding? Information concerning these issues will help us assess the amount of closed captioning and video description that may be available in the future as well as the burden any mandatory requirements in this area may impose.

⁵¹ The National Captioning Institute is a private, non-profit corporation that was founded in 1979 with \$6 million in federal start-up funds. See H.R. Rep. No. 767, *supra* note 28, at 4.

⁵² Russ Britt, "Audience for Closed-Captioning Services Grows," *Los Angeles Daily News*, April 3, 1995, at B1 (available on Westlaw: 1995 WL 5395368).

⁵³ See H.R. Rep. No. 767, *supra* note 28, at 4-5.

⁵⁴ *Id.*

VI. MARKET INCENTIVES FOR CLOSED CAPTIONING AND VIDEO DESCRIPTION

22. *Closed Captioning.* The large number of individuals with hearing disabilities would appear to create a considerable market demand for closed captioned programming. This suggests that in the increasingly competitive television industry, providers and producers of both advertising-supported and subscriber-based video programming would have an incentive to provide this service as a means of attracting audiences. Indeed, in enacting the TDCA, Congress found that "the availability of decoder-equipped television sets will significantly increase the audience that can be served by closed-captioning television, and such increased market will be an incentive to the television medium to provide more captioned programming."⁵⁵ Now, two years after the TDCA's requirements became effective, there are reportedly about 30 million decoder-equipped television receivers that have been purchased in this country, with another 1.5 million sold every month.⁵⁶

23. We seek comment on the role free-market forces have played and can play in promoting the provision of closed captioning of video programming. For example, are advertisers actively seeking to market to individuals with hearing impairments, which could in turn encourage closed captioning of television programming? How does the audience size of a particular program influence the likelihood that the program will be closed captioned? Are there presently a sufficient number of decoder-equipped television receivers in the market to provide the hoped-for incentive for the television industry to provide closed captioning? We welcome comment, including empirical and economic analyses, on these and any other issues concerning the market forces at work.

24. *Video Description.* As with closed captioning, we solicit comment on the role market-based incentives can play in fostering this service. We would be particularly interested in NTN's experience in providing video description. Is NTN offered on a non-basic cable tier, and has it attracted new subscribers that would not otherwise subscribe to cable service? Does its experience indicate a market demand that would support the video description of a greater number of programs on a greater number of distribution outlets?

VII. INQUIRY REGARDING MANDATORY CAPTIONING AND VIDEO DESCRIPTION REQUIREMENTS

25. *Introduction.* With this *Notice of Inquiry* we seek to obtain information on a variety of issues concerning closed captioning and video description, including the availability of these services resulting either from market incentives or voluntary efforts by video programming providers and producers. As noted, in the context of closed captioning the

⁵⁵ Section 2(9) of the TDCA, Pub. L. 101-431, 104 Stat. 960, 47 U.S.C. § 303 note.

⁵⁶ Russ Britt, "Audience for Closed-Captioning Services Grows," *Los Angeles Daily News*, April 3, 1995, at B1 (available on Westlaw: 1995 WL 5395368).

Commission has stated that some form of mandatory requirement could prove necessary.⁵⁷ There also is legislation pending in Congress that generally would require closed captioning of video programming and which would require the Commission to examine the means of promoting video description.⁵⁸

26. Before these mandatory requirements become law, the legislation must pass both houses of Congress and be signed by the President. Alternatively, the Commission could assess the possibility of adopting regulatory requirements in this area under its existing statutory authority.⁵⁹ We are not presently proposing such action, but we do take this opportunity to request comment on the general form any mandatory closed captioning or video description requirements should take if they are deemed necessary. We particularly seek comment on the following matters.

27. *The application of mandatory requirements.* One issue we seek comment on is which entities should be subject to any mandatory requirements. Broadcast television stations and other delivery systems produce some of their own programming, such as news programs, but they often obtain programming from program producers or independent distributors of such programming.⁶⁰ The legislation pending in Congress refers to "video programming providers or owners,"⁶¹ and a House report states that it "is clearly more efficient and economical to caption programming at the time of production and to distribute it with captions than to have each delivery system or local broadcaster caption the program."⁶² Should mandatory requirements regarding closed captioning or video description be imposed on entities that produce or distribute programming that is aired on television? Or should they be confined to the "providers" of this programming, *i.e.*, broadcasters, cable systems, wireless cable, SMATV operators, direct-to-home satellite services, and local exchange carrier/video dialtone systems? Should *both* providers and owners/producers be subject to any mandatory requirements that might be adopted, with parties being allowed to allocate responsibilities in this area by private contract? We seek comment on current industry practices for providing closed captioning and video description. Which entity -- producer, distributor, or provider -- normally provides these services?

⁵⁷ See *supra* note 16.

⁵⁸ See *supra* at ¶¶ 7-8.

⁵⁹ See *infra* at ¶ 36.

⁶⁰ See *Review of Prime Time Access Rule*, 9 FCC Rcd 6328, 6330-36 (1994) (describing the television program production and distribution process).

⁶¹ H.R. 1555, *supra* note 19, at § 204(b); S. 652, *supra* note 19, at § 308(a).

⁶² H.R. Rep. No. 204, 104th Cong., 1st Sess. 114 (1995).

28. *Exemptions.* Both the Senate and House legislative proposals would provide exemptions from closed captioning requirements. The House bill provides that "the Commission may exempt by regulation programs, classes of programs, or services for which the Commission has determined that the provision of closed captioning would be economically burdensome to the provider or owner of such programming."⁶³ It also provides that a video programming provider or owner may petition the Commission for an exemption if the closed captioning requirements would result in an "undue burden," which is defined as a "significant difficulty or expense."⁶⁴ The Senate bill incorporates a more lenient standard: closed captioning would not be required, and the Commission could extend exemptions, where it is not "readily achievable," which is defined to mean "easily accomplishable and able to be carried out without much difficulty or expense."⁶⁵

29. We generally seek comment on the appropriate balance that should be struck between providing access to Americans with disabilities through closed captioning and video description and the costs and burdens imposed by mandatory requirements. Any requirements in this area should recognize the financial constraints facing many programming producers and providers, especially smaller entities. We request comment on what factors should be examined in determining whether an exemption should be granted, either under an "undue burden" or a "readily achievable" standard that may be incorporated into any legislation that is enacted. Relevant factors would include the cost of the captioning or video description as well as the financial resources of the programming provider or owner/producer. The House bill provides that the following factors should be examined in determining whether closed captioning would impose an undue economic burden: "(1) the nature and cost of the closed captions for the programming; (2) the impact on the operation of the provider or program owner; (3) the financial resources of the provider or program owner; and (4) the type of operations of the provider or program owner."⁶⁶ Are there other factors that would be relevant? Should particular types of programs (*e.g.*, locally or regionally produced programs), or small programming providers or owners/producers, be categorically exempted from captioning or video description requirements?

30. In developing criteria for granting exemptions, there is a need to explore

⁶³ H.R. 1555, *supra* note 19, at § 204(d)(1).

⁶⁴ *Id.* at § 204(d)(3) & (e).

⁶⁵ S. 652, *supra* note 19, at § 308(a). The Senate bill incorporates the definition of "readily achievable" used in the ADA. *See* 42 U.S.C. § 12181(9). The "undue burden" standard employed in the House bill is also borrowed from the ADA. *See id.* at § 12182(b)(2)(A)(iii); 28 C.F.R. § 36.104 (regulations implementing public accommodations provisions of ADA adopted by the U.S. Dep't of Justice). *See also* 28 C.F.R. part 36, App. B, at 591 (1994) ("The 'readily achievable' standard is a 'lower' standard than the 'undue burden' standard in terms of the level of effort required.").

⁶⁶ H.R. 1555, *supra* note 19, at § 204(e).

approaches that would minimize administrative burdens and FCC oversight. Exemptions could be granted based on a formula or set of guidelines in order to provide greater certainty. For example, closed captioning or video description might only be required where their cost falls below a certain percentage of the total production cost of a program. Or these services could be required only for programs that reach a particular size audience. Alternatively, exemptions could be granted on a more case-by-case basis that involves individualized determinations in granting exemptions. We seek comment on the type of formulas that could be used, the nature of a case-by-case approach, and the tradeoffs between these two alternatives.

31. We also request comment on whether there are particular types of programs for which it is either impractical or unnecessary to provide closed captioning or video description. For example, is it necessary to require video description of a sporting event that already provides a play-by-play commentary or that is covered by a radio broadcast? In addition, the pending legislation would exempt any closed captioning requirement where providing this service would be inconsistent with an existing contract.⁶⁷ We solicit comment on the types of contracts and the circumstances under which this situation would arise.

32. *Technical and Quality Standards.* There presently are no FCC standards governing the transmission of video descriptions *per se*.⁶⁸ We seek comment on whether there is any need for technical or quality standards to ensure that video descriptions are accessible and understandable to individuals with vision disabilities. Would laboratory or field testing be necessary to set any such standards, and, if so, what would be the nature of this testing? To what extent do other ancillary uses compete with video description now and in the future for use of the Second Audio Program channel?⁶⁹ What impact will the implementation of digital technology have on the transmission of video description?⁷⁰ We solicit comment on ways to promote any necessary universal design standards that will obviate the need for costly retrofitting in order to carry video description over digital signals.

33. We also request comment on the current accuracy of closed captioning on television programming. There have been reports regarding inaccurate closed captioning,

⁶⁷ H.R. 1555, *supra* note 19, at § 204(d)(2); S. 652, *supra* note 19, at § 308(a).

⁶⁸ Like other ancillary services, such transmissions are prohibited from causing observable degradation to any portion of the visual or aural broadcast signal. *See supra* note 18.

⁶⁹ The Second Audio Program channel appears to be used by some television stations to simulcast a Spanish translation of a program. *See, e.g., Pacific FM, Inc.*, 10 FCC Rcd 3479, 3482 (1995).

⁷⁰ *See also supra* at ¶ 17 (describing ATV proceeding and the need for ATV to be capable of carrying closed captioning).

especially for live programming where there is no chance to review and correct for errors.⁷¹ We seek comment on the extent of this problem and any steps that could be taken to promote accurate and appropriately formatted captions. We are particularly interested in proposals to address such concerns through private-industry initiatives in order to avoid unnecessary government regulation in this area.

34. *Transition.* We seek comment on appropriate timetables for implementing any closed captioning or video description requirements that may be imposed. Should any such requirements be instituted over a period of time? Should requirements first be imposed on larger markets or larger video programming providers and producers? Should they first take effect for programming, such as news, that serves an especially important public interest? We also ask parties to comment on whether the implementation of digital technology on broadcast television, cable, and other delivery systems should factor into any transition that is adopted. Should such a transition seek to minimize the burden that may result from requiring closed captioning or video description designed for analog programming to be carried over a digital signal?

35. *Strategies to Improve Competition and Innovation.* We request comment on ways to promote competition and innovation in the provision of closed captioning and video description. Are there non-regulatory steps that could be taken to foster the growth of these services? Are expenditures for these services tax deductible, and, if not, would such favorable tax treatment lead to significant increases in their availability?

36. *Legal Authority.* The pending Senate and House bills, if enacted, would provide express statutory authority for imposing mandatory closed captioning requirements. The House bill would also permit the Commission to adopt regulations to promote the accessibility of video programming to persons with visual disabilities after conducting an inquiry into video description. However, we seek comment on the scope of the Commission's authority under current law to adopt regulations imposing either closed captioning or video description requirements on broadcast television licensees, cable operators, wireless cable systems, SMATV operators, direct-to-home satellite services, and local exchange carrier/video dialtone systems, as well as on producers/owners and other distributors of such programming. Commenters should address with specificity the basis for their views concerning the Commission's authority, and also address any other legal constraints that they believe may apply in this area.

⁷¹ See William Neikirk, "Closed Captioned TV Kneads Emproovmint," *Chicago Tribune*, Dec. 12, 1993, at 1 (available on Westlaw: 1993 WL 11834261).

VIII. CONCLUSION

37. Closed captioning and video description of video programming can offer important benefits to millions of Americans with hearing and visual disabilities as well as other Americans. We issue this *Notice of Inquiry* to seek comment on these benefits, the costs and availability of these services, and the best means of promoting their greater use.

IX. ADMINISTRATIVE MATTERS

38. *Authority.* This *Notice of Inquiry* is issued pursuant to authority contained in Section 4(i), 4(j), and 403 of the Communications Act of 1934, as amended.

39. *Comment Information.* Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before January 29, 1996, and reply comments on or before February 14, 1996. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, parties must file an original and four copies of all comments, reply comments and supporting comments. If parties want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. Comments and reply comments should be sent to the Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554.

40. *Ex Parte Rules.* There are no *ex parte* or disclosure requirements applicable to this proceeding pursuant to 47 C.F.R. § 1.1204(a)(4).

41. *Additional Information.* For additional information on this proceeding, contact Charles W. Logan (202/776-1653) of the Policy & Rules Division, Mass Media Bureau.

FEDERAL COMMUNICATIONS COMMISSION


William F. Caton
Acting Secretary