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

In the Matter of:	)	
	)	
Carriage of Digital Television Broadcast Signals	)	CS Docket No. 98-120
	)	
Amendments to Part 76 of the Commission's Rules	)	
	)	
Implementation of the Satellite Home Viewer Improvement Act of 1999:	)	
	)	
Local Broadcast Signal Carriage Issues	)	CS Docket No. 00-96
	)	
Application of Network Non-Duplication, Syndicated Exclusivity and Sports Blackout Rules to Satellite Retransmission of Broadcast Signals	)	CS Docket No. 00-2

FIRST REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULE RULEMAKING

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By the Commission: Commissioner Ness approving in part, dissenting in part, and issuing a statement; Commissioner Furchtgott-Roth approving in part, dissenting in part, and issuing a statement at a later date; Commissioner Powell issuing a statement; Commissioner Tristani dissenting and issuing a statement.

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[*] The final version of this *Report and Order and Further Notice of Proposed Rulemaking* was approved by the Commission on 1/19/01.

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I. INTRODUCTION

1. In the Notice of Proposed Rulemaking ("*Notice*") in this docket, we sought comment on a variety of issues relating to the carriage of digital television broadcast signals by cable television operators.[1] With this First Report and Order and Further Notice of Proposed Rulemaking ("*Report and Order*" / "*FNPRM*"), we resolve a number of technical and legal issues related to the carriage of digital broadcast signals under Sections 325 (retransmission consent), 336 (broadcast spectrum flexibility and ancillary and supplementary services), 614 (mandatory carriage of commercial television stations) and 615 (mandatory carriage of noncommercial educational television stations) of the Communications Act of 1934 ("Act").[2] In addition, we clarify that a digital-only television station may assert its right to carriage.

[1] *Carriage of the Transmissions of Digital Television Broadcast Stations*, Notice of Proposed Rulemaking, 13 FCC Rcd. 15092 (1998) ("DTV Must Carry Notice").

[2] We first sought and received comments addressing digital broadcast television carriage issues in 1995 in another docket. *See Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Fourth Further Notice of Proposed Rulemaking and Third Notice of Inquiry, 10 FCC Rcd. 10540 (1995) ("*DTV Fourth FNPRM"*). We will refer to all Orders in Mass Media Docket No. 87-268, such as this one, as DTV Notices or Orders, depending upon the item.

(continued….)

Specifically, new television stations that transmit only digital signals, and current television stations that return their analog spectrum allocation and convert to digital operations, must be carried.

2. In this *Report and Order*, we resolve matters relating to retransmission consent, content-to-be-carried, channel capacity, channel placement, and a host of other operational issues. Our principal goal is to provide a framework for private resolution of the issues raised in the *Notice*, wherever possible, and to give guidance on technical issues relating to the carriage of digital television signals. Based on the record currently before us, we believe that the statute neither mandates nor precludes the mandatory simultaneous carriage of both a television station's digital and analog signals ("dual carriage").

3. On this point, we tentatively conclude that, based on the existing record evidence, a dual carriage requirement appears to burden cable operators' First Amendment interests substantially more than is necessary to further the government's substantial interests of preserving the benefits of free over-the-air local broadcast television; promoting the widespread dissemination of information from a multiplicity of sources; and promoting fair competition in the market for television programming.[3] However, in order to ensure that we have a sufficient body of evidence before us in which to evaluate this issue fully, so that we can ultimately resolve the issue of mandatory dual carriage, we find it necessary to issue a *Further Notice of Proposed Rulemaking* addressing several critical questions at the center of the carriage debate including, *inter alia*: (1) whether a cable operator will have the channel capacity to carry the digital television signal of a station, in addition to the analog signal of that same station, and without displacing other programming or services; (2) whether market forces, through retransmission consent, will provide cable subscribers access to digital television signals and television stations' access to carriage on cable systems; and (3) how the resolution of the carriage issues would impact the digital transition process. The responses to these and other inquiries will help determine the answer to the dual carriage issue.[4] In the *Further Notice*, we also raise questions concerning the applicability of the rules and policies we adopt herein to satellite carriers under the Satellite Home Viewer Improvement Act of 1999 ("SHVIA").[5] These and other matters will be addressed in the second phase of this proceeding.

4. At the outset, we recognize a number of statutory and public policy goals inherent in Section 614 and 615, and other parts of the Act. These include: (1) maximizing incentives for inter-

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We note that matters concerning compatibility between digital cable operations and digital television reception equipment, which were once part of this docket, have been addressed by the Commission in a separate proceeding. *See Compatibility Between Cable Systems and Consumer Electronic Equipment*, Report and Order in PP Docket No. 00-67 (rel. Sept. 15, 2000).

[3] *See Turner Broadcasting System, Inc. v. U.S..,* 520 U.S. 180 (1997).

[4] We will be sending out a channel capacity and retransmission consent survey to 16 cable operators in a separately issued item ("Cable Survey")(see below for more information). The responses from the survey will be incorporated into the *Second Report and Order* in this proceeding.

[5] The Commission must apply the cable carriage rules in a comparable manner to satellite carriers. Satellite Home Viewer Improvement Act of 1999 ("SHVIA"), Pub.L. No. 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999); *See also Implementation of the Satellite Home Viewer Improvement Act of 1999: Broadcast Signal Carriage Issues*, Report and Order, FCC 00-417 (rel. November 30, 2000). *See also Implementation of the Satellite Home Viewer Improvement Act of 1999: Application of Network Non-duplication, Syndicated Exclusivity and Sports Blackout Rules to Satellite Retransmission of Broadcast Signals,* Report and Order, FCC 00-388, (rel. November 2, 2000).

industry negotiation; (2) minimizing disruption to cable subscribers as well as the cable industry; (3) promoting efficiency and innovation in new technologies and services; (4) advancing multichannel video competition; (5) maximizing the introduction of digital broadcast television; and (6) maintaining the strength and competitiveness of broadcast television. Our goal is to facilitate an efficient market-oriented structure that implements the Act in a manner that, to the extent possible, permits private agreements to resolve issues. Based on the importance of cable television in the video programming marketplace, we believe that the cooperation and participation by the cable industry during the transition period would further the successful introduction of digital broadcast television.

II. BACKGROUND

5. Pursuant to Section 614 of the Act, and the implementing rules adopted by the Commission in *Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Broadcast Signal Carriage Issues Report and Order ("Must Carry Order"),*[6] a commercial television broadcast station is entitled to request carriage on cable systems located within the station's market. A station's market for this purpose is its "designated market area," or DMA, as defined by Nielsen Media Research.[7] The Act states that systems with more than 12 usable activated channels must carry local commercial television stations, "up to one-third of the aggregate number of usable activated channels of such system[s]."[8] Beyond this requirement, the carriage of additional television stations is at the discretion of the cable operator. In addition, cable systems are obliged to carry local noncommercial educational television stations ("NCE stations") according to a different formula and based upon a cable system's number of usable activated channels.[9] Low power television stations, including Class A stations, may request carriage if they meet six statutory criteria.[10] A cable operator, however, cannot carry a low power television station in lieu of a full power television station.[11]

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[6]*Broadcast Signal Carriage Issues*, 8 FCC Rcd 2965 (1993) ("*Must Carry Order*"); *See also*, *Broadcast Signal Carriage Issues*, MM Docket 92-259, 9 FCC Rcd 6723 (1994) ("*Must Carry Reconsideration*").

[7]A DMA is a geographic market designation that defines each television market exclusive of others, based on measured viewing patterns.

[8]47 U.S.C. §534(b)(1)(B); 47 C.F.R. §76.56(b)(2). A cable operator of a cable system with 12 or fewer usable activated channels shall carry the signals of at least three local commercial television stations, except that if such a system has 300 or fewer subscribers, it shall not be subject to any requirements under this section so long as such system does not delete from carriage by that system any signal of a broadcast television station. 47 U.S.C. §534(b)(1)(A); 47 C.F.R. §76.56(b)(1).

[9]Noncommercial television stations are considered qualified, and may request carriage if they: (1) are licensed to a community within fifty miles of the principal headend of the cable system; or (2) place a Grade B contour over the cable operator's principal headend. Cable systems with: (1) 12 or fewer usable activated channels are required to carry the signal of one qualified local noncommercial educational station; (2) 13-36 usable activated channels are required to carry no more than three qualified local noncommercial educational stations; and (3) more than 36 usable activated channels shall carry at least three qualified local noncommercial educational stations. *See* 47 U.S.C. §535(b) and (e); 47 C.F.R. §76.56(a).

[10]*See* 47 U.S.C. §534(h)(2); 47 C.F.R. §76.55(d).

[11]47 U.S.C. §§534(b)(1)(A) and (h)(2); 47 C.F.R. §76.56(b)(1) and (b)(4)(i).

6. Cable operators are currently required to carry local television stations on a tier of service provided to every subscriber[12] and on certain channel positions designated in the Act.[13] Cable operators are prohibited from degrading a television station's signal,[14] but are not required to carry duplicative signals[15] or video that is not considered primary.[16] Television stations may file complaints with the Commission against cable operators for non-compliance with Sections 614 and Section 615.[17] In addition, both cable operators and television stations may file petitions with the Commission to either expand or contract a commercial television station's market for broadcast signal carriage purposes.[18] These statutory requirements were implemented by the Commission in 1993,[19] and are reflected in Sections 76.56-64 of the Commission's rules.

7. In a recent Memorandum Opinion and Order regarding band-clearing of the 700 MHz spectrum ("*700 MHz Order*"), the Commission reiterated that cable carriage can play an important role as an alternative distribution channel during the transition period by providing continued service to viewers who would otherwise be deprived of broadcast service.[20] Although the Commission stated that it would be considering the scope and manner of cable carriage of digital broadcast signals in this proceeding, it discussed the cable industry's carriage obligations for future digital television signals in the *700 MHz Order*. First, the Commission clarified that cable systems are ultimately obligated to accord carriage rights to local broadcasters' digital signals.[21] Specifically, the Commission stated that existing analog stations that return their analog spectrum allocation and convert to digital are entitled to mandatory carriage for their digital signals consistent with applicable statutory and regulatory provisions.[22] The Commission also stated that to facilitate the continuing availability during the transition of the analog signal of a broadcaster who is party to a voluntary band clearing agreement with new 700 MHz licensees, such a broadcaster could, in this context and at its own expense, provide its broadcast

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[12]*See* 47 U.S.C. §534(b)(7); 47 U.S.C. §535(h).

[13]*See* 47 U.S.C. §534(b)(6); 47 U.S.C. §535(g)(5).

[14]*See* 47 U.S.C. §534(b)(4)(A); 47 U.S.C. §535(g)(2).

[15]*See* 47 U.S.C. §534(b)(5); 47 U.S.C. §535(b)(3)(C).

[16]*See* 47 U.S.C. §534(b)(3)(A); 47 U.S.C. §535(g).

[17]*See* 47 U.S.C. §§534(d) and 535(j). *See also* 47 C.F.R. §76.61.

[18]*See* 47 U.S.C. §534(h)(1)(C). *See also* 47 C.F.R. §76.59.

[19]*See Must Carry Order*, 8 FCC Rcd 2965.

[20]*See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, FCC 00-224 at para. 65 (released June 30, 2000)("700 MHz Order").

[21]*See 700 MHz Order* at para. 65.

[22]*Id.*

digital signal in an analog format for carriage on cable systems.[23] Specifically, the Commission stated that, in these circumstances, nothing prohibits the cable system from providing such signals in an analog format to subscribers, in addition to or in place of the broadcast digital signal, pursuant to an agreement with the broadcaster.[24]

III. CARRIAGE DURING THE DTV TRANSITION

8. The statutory provision triggering this rulemaking is found in Section 614(b)(4)(b) of the Act. This section requires that:

> At such time as the Commission prescribes modifications of the standards for television broadcast signals, the Commission shall initiate a proceeding to establish any changes in the signal carriage requirements of cable television systems necessary to ensure cable carriage of such broadcast signals of local commercial television stations which have been changed to conform with such modified standards.[25]

9. In the *Notice*, we recognized that, as a policy matter, the most difficult carriage issues arise during the transition because there will exist, for a temporary period, approximately twice as many television broadcast signals as are now on the air.[26] We noted that toward the end of the transition period, there would be an increasing redundancy of basic content between the analog and digital signals as the Commission's simulcasting requirements are phased in.[27] We recognized that, to the extent that the Commission imposes a dual carriage requirement, cable operators could be required to carry double the amount of television signals, that will eventually carry identical content, while having to drop various and varied cable programming services where channel capacity is limited.[28] We sought comment on several carriage options that address the needs of the broadcasters and the concerns of the cable operators

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[23] *Id.*

[24] *Id.*

[25] 47 U.S.C. §534(b)(4)(B). There is little discussion of this provision in the Act's legislative history. However, the relevant language states that "when the FCC adopts new standards for broadcast television signals, such as the authorization of broadcast high definition television (HDTV), it shall conduct a proceeding to make any changes in the signal carriage requirements of cable systems needed to ensure that cable systems will carry television signals complying with such modified standards in accordance with the objectives of this section." H.R. Rep. No. 102-862, 102d Cong., 2d Sess. at 67 (1992); s*ee also* H.R. Rep. No. 102-628, 102d Cong., 2d Sess. at 94 (1992) ("The Committee recognizes that the Commission may, in the future, modify the technical standards applicable to television broadcast signals. In the event of such modifications, the Commission is instructed to initiate a proceeding to establish technical standards for cable carriage of such broadcast signals which have been changed to conform to such modified signals."). The Senate Committee Report describes the provision as providing that when the FCC adopts new standards for broadcast television signals, such as the authorization of broadcast HDTV, "it shall conduct a proceeding to make any changes in the signal carriage requirements of cable systems needed to ensure that cable systems will carry television signals complying with such modified standards in accordance with the objectives of new Section 614." *See* S. Rep. No. 102-92, 102d Cong., 1st Sess. at 85 (1991) ("*S. Rep. No. 102-92*").

[26] *DTV Must Carry Notice,* 13 FCC Rcd at 15113.

[27] *Id.*

[28] *Id.*

as well as the timing of mandatory digital broadcast signal carriage rules.[29] These proposals included a range of approaches from "immediate" or dual carriage, in which cable systems would be required to carry both analog and digital commercial television signals up to the one-third capacity limit;[30] the "either-or" proposal, in which broadcasters could choose must carry for either their analog or digital signals during the transition years;[31] and the "no must carry proposal," under which digital signals would not have mandatory carriage rights during the transition period, but only when the transition is over.

10. The broadcast industry generally urges the Commission to impose a dual carriage requirement during the transition period to ensure that viewers have continued access to all available local television programming.[32] In contrast, NCTA and other cable industry participants contend that digital must carry will "dictate technological outcomes before the market is ready."[33] Time Warner argues that if cable operators were required to carry digital broadcast signals during the transition, an operator's channel line-up would consist of blank screens because most consumers will not have digital television receivers or converters allowing them to display digital signals on their analog sets.[34] Cable programmers oppose a dual carriage requirement because they fear being dropped or being unable to gain carriage due to the addition of digital television signals to a cable operators' channel line-up.[35]

11. There was support for the "either-or" proposal, particularly from the public interest community. The United Church of Christ and other consumer advocates, filing jointly ("UCC"), believe that this middle-ground proposal, as it applies to commercial television stations, is the "most market friendly and statute friendly" solution.[36] They state that as penetration of digital receivers increases, compatibility between digital television receivers and cable equipment improves, and broadcasters finalize business plans for their new digital signal, each broadcaster can decide which of its signals it

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[29] *Id.*

[30] *Id.*

[31] *Id.* at 15116. The Commission posited that the mandatory carriage option would default to the digital signal when the 100 percent simulcast rule goes into effect in 2005. *Id.*

[32] *See* Granite Broadcasting Comments at 3; Retlaw Comments at 5; ALTV Comments at 22; MSTV Comments at 52-53; Morgan Murphy Comments at 13.

[33] NCTA Comments at 3 and 39-40; AHN et. al. Comments at 32.

[34] Time Warner Comments at 8.

[35] HGTV/TV Food, for example, states that they are cable programming services owned by the E.W. Scripps Company, the licensee of nine television broadcast stations. They state that while Scripps supported Congress' analog must carry requirement, fundamental changes in the video programming marketplace, now force it to oppose a digital must carry requirement. HGTV/TV Food Comments at 2.

[36] UCC Comments at 11. UCC does advocate, however, that there should be a dual carriage requirement for non-duplicative noncommercial digital broadcast signals as those particular entities truly serve the public interest. *Id.* at 13-15.

would prefer to be carried.[37] UCC believes this option will help speed the transition to digital, preserve local broadcasting, and avoid duplicative signals that reduce diversity.[38]

12. After reviewing the extensive comments on the central issue of dual carriage during the transition period, we find it is unjustified for the Commission to act at this time in light of the constitutional questions the subject presents, including the related issues of economic impact.[39] We need further information on a range of issues, including cable system channel capacity and digital retransmission consent agreements to build a substantial record upon which to develop the best policy for the various entities impacted in this area. Notwithstanding our decision to obtain further comment on these matters, it is important to clarify that broadcast stations operating only with digital signals are entitled to mandatory carriage under the Act. We find that the burden on a cable operator to carry such stations is *de minimis*, with regard to new digital-only stations, and is essentially a trade-off in the case of a station substituting its digital signal in the place of its analog signal. To implement this clarification, we amend Section 76.5, the definition of television broadcast station, and specifically include the digital television Table of Allotments found at Section 73.622 of the Commission's rules.[40]

A. Commercial Television Stations

13. Section 614(a) of the Communications Act of 1934, as amended, provides:

> Carriage Obligations. – Each cable operator shall carry, on the cable system of that operator, the signals of local commercial television stations and qualified low power stations as provided by this section. Carriage of additional broadcast television signals on such system shall be at the discretion of such operator, subject to section 325(b).[41]

This section requires carriage for local commercial stations subject to the other provisions of Section 614. This section does not distinguish between analog and digital signals and supports the argument that digital signals are entitled to mandatory carriage.[42]

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[37] *Id.*

[38] UCC Reply Comments at 23. UCC, however, disagrees with the Commission proposal to the extent that it suggests that the carriage option should default to the digital signal in the year 2005 as digital receiver penetration will still be well below 50% at that time. UCC Comments at 11.

[39] Since the issue of dual carriage will be addressed in the next phase of this proceeding, we need not consider at this time whether we should adopt separate, specific carriage rules for small cable operators as requested by America's Cable Association (formerly known as the small cable business association or "SCBA") and others. *See* SCBA Comments at 9, 13, 14; Pellegrin Comments at 5. The findings below, therefore, shall apply with equal force to large and small cable systems.

[40] *See* Appendix D.

[41] 47 U.S.C. § 534(a). We note that we are addressing the issue of whether a digital-only television station has a right to carriage, under Section 614(a), in a companion proceeding. *See* WHDT-DT, Channel 59-Stuart, Florida, *Petition for Declaratory Ruling that Digital Broadcast Stations Have Mandatory Carriage Rights*, FCC No. 01-23, (adopted Jan. 18, 2001).

[42] A similar provision, Section 615(a), requires carriage of noncommercial stations, as discussed more fully, *infra. See also* 47 U.S.C. § 535(a).

14. More specific to this proceeding, Section 614(b)(4)(B) provides that the Commission "shall initiate a proceeding to establish any changes in the signal carriage requirements of cable television systems necessary to ensure cable carriage of such broadcast signals of local commercial television stations which have been changed to conform with such modified standards."[43] Commenters offer differing interpretations of this Section. NAB and other broadcasters argue that Section 614(b)(1)(B) neither distinguishes between digital and analog signals nor establishes a transition period. Therefore, they contend, both should be carried simultaneously and immediately.[44] In contrast, NCTA and others in the cable industry argue that the phrase, "which have been changed," means that cable operators should be required to carry digital signals only when analog signals have been changed to digital signals, i.e., when the broadcasters no longer have both.[45] NCTA further argues that the Commission may not order mandatory carriage of both the DTV and analog signals during the transition period because the Commission is not expressly authorized to do so in the Act, and, based on Section 624(f), the Commission's authority may not be inferred.[46] We do not accept the arguments of either those commenters who say that the statute forbids dual carriage; nor those who argue that the statute compels dual carriage.

15. With respect to carriage of digital-only signals, we do not agree with NCTA's interpretation to the extent that it is intended to suggest that this Section requires a television station to wait until the end of the transition period before seeking digital signal carriage. There is nothing in the plain language of the statute or the legislative history to require such a restrictive reading. Indeed, as we noted above, section 614(a), which imposes carriage obligations on cable systems, does not distinguish between digital and analog signals. Thus, when a television station seeks carriage, the cable system must oblige regardless of whether the signal is in an analog or digital format, and provided that the station satisfies all other provisions of the Act and the Commission's rules.

16. We also disagree with NCTA's argument that Section 624(f) of the Act prohibits us from requiring the carriage of digital television signals. This particular section forbids Federal agencies and others from requiring the content of cable services except as expressly provided for in Title VI. Given that Congress has spoken to the issue of digital broadcast signal carriage in Section 614(b)(4)(B), and given such carriage is not barred under another statutory provision, digital broadcast signal carriage fits within the express requirement of section 614(a) and thus is 'expressly authorized' within the meaning of section 624(f). As such we do not believe that the Commission is outside the scope of its authority to impose such requirements simply because the signals in question are in a digital rather than in an analog format.

B. Noncommercial Television Stations

17. The importance of ensuring that noncommercial educational stations are accessible to the viewing public is consistently emphasized in the Act itself and its legislative history. Indeed, the Act

[43] 47 U.S.C. §534(b)(4)(B).

[44] NAB Comments at 3. *See also* ALTV Comments at 7 and MSTV Comments at 17.

[45] NCTA Comments at 10-11. *See also* Time Warner Comments at 31 and BET Reply Comments at 3.

[46] NCTA Comments at 7. (The Commission's authority to enact regulations affecting cable operators is strictly limited by Section 624(f) of the Act which provides: "Any Federal agency, State or franchising authority may not impose requirements regarding the provision of or content of cable services, except as expressly provided in this title.") 47 U.S.C. §544(f)(1).

mandates that cable operators devote additional channel capacity for the carriage of noncommercial educational television stations ("NCEs").[47] Congress found "a substantial governmental and First Amendment interest in ensuring that cable subscribers have access to local noncommercial stations."[48]

18. As stated above, Section 614(b)(4)(B) requires the Commission to initiate a proceeding to establish any changes in the signal carriage requirements of cable television systems that are necessary "to ensure cable carriage of such broadcast signals of local commercial television stations. . . ." (emphasis added).[49] In the *Notice* we asked how, if at all, carriage rights for digital noncommercial educational stations are affected given that they are not explicitly discussed in this section.[50]

19. The Association of America's Public Television Stations ("AAPTS"), on behalf of public broadcasters, states that the Commission has the authority to implement carriage requirements for all public television stations under Section 615 of the Act.[51] It asserts that Congress has not prohibited the Commission from adopting digital signal carriage rules for NCE stations.[52] It believes that the failure to include a provision in Section 615 that parallels Section 614(b)(4)(B) may have been an oversight, or it may have reflected the view that such a provision was unnecessary.[53] AAPTS argues that cable operators have special incentives to deny carriage to public television stations because their programming is not aimed at mass audiences.[54]

20. NCTA asserts that Section 615 applies only to "qualified" noncommercial television stations. The Act defines those stations to mean: "Any television broadcast station which . . . under the rules and regulations of the Commission in effect on March 29, 1990, is licensed by the Commission as a noncommercial educational television broadcast station and which is owned and operated by a public agency, nonprofit foundation, corporation, or association. . . "[55] NCTA argues that the Commission's digital television rules were not in effect on March 29, 1990, and the rules lending public television stations an additional channel on which to transmit digital signals during the transition were not adopted until seven years later. Thus, according to NCTA, Congress did not intend for cable operators to carry an NCE station's digital and analog signals during the transition.[56]

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[47]*See* 47 U.S.C. §535.

[48]H.R. Rep. No. 862, 102nd Congress, 2d Sess. at 56 (1992)

[49]47 U.S.C. §534(b)(4)(B).

[50]*DTV Must Carry Notice*, 13 FCC Rcd at 15120.

[51]AAPTS Comments at 13-14.

[52]*Id.*

[53]*Id.*

[54]*Id.* at 18. UCC believes that the Commission has ample authority to mandate must carry of both the analog and digital signals of noncommercial stations. However, UCC contends that this must carry privilege should only be available to (1) non-duplicative, non-time shifting programming; and (2) programming that is not advertiser supported. UCC Comments at 11.

[55]*See* 47 U.S.C. §535(l)(1)(A)(ii).

[56]NCTA Reply Comments at 13.

21. We believe that the government's interest in ensuring the availability of local noncommercial educational television on cable systems is manifest.[57] Section 615(a) states that "[E]ach cable operator of a cable system shall carry the signals of qualified noncommercial educational television stations in accordance with the provisions of this section."[58] Section 615(a) does not distinguish between digital and analog signals with regard to the 'signals' that must be carried. The Act does not contain any words or provisions specifically excluding the carriage of NCE digital television signals. The legislative history of the Act is also void of any language suggesting that Congress intended to deny mandatory carriage to digital NCE station signals. In addition, there is an implication in Section 336 and its legislative history that Congress intended the Commission to address all must carry issues in the Section 614(b)(4)(B) proceeding, including those relating to noncommercial educational stations covered by Section 615. Section 336 applies only to advanced (digital) television services; it has no application in the analog context. Section 336(b)(3) specifies that ancillary and supplementary services have no mandatory carriage rights under Section 614 or 615, which necessarily contemplates some consideration of must carry under Section 615 for noncommercial educational stations.[59] The legislative history of the conference agreement for this section states: "With respect to (b)(3), the conferees do not intend this paragraph to confer must carry status on advanced [digital] television or other video services offered on designated frequencies. Under the 1992 Cable Act, that issue is to be the subject of a Commission proceeding under section 614(b)(4)(B) of the Communications Act."[60] The most logical inference is that Congress contemplated that the Commission would address the issue of must carry for digital signals in the proceeding authorized by Section 614(b)(4)(B), which would cover both local commercial and noncommercial television stations.[61]

22. We therefore find that the digital signals of NCE stations are to be treated like their commercial counterparts for cable carriage purposes. Thus, NCE stations that broadcast only in digital are entitled to immediate carriage by cable systems, subject to the parameters set forth in Section 615 of the Act and the relevant Commission orders. And, like our decision with regard to commercial television stations, we decline to address the dual carriage issue for NCE stations in this phase of the proceeding.

23. AAPTS argues that the Commission should clarify the qualifying statutory term, "Grade B Service Contour." AAPTS asserts that this provision should be read to refer to a station for which either the Grade B service contour of the station or its digital coverage contour, whichever is larger, encompasses the principal headend of the cable system on which the station seeks carriage.[62] Given that

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[57]*See, e.g.*, 1992 Conference Report at 50, 53, and 56. *See also*, declaration of policy underlying establishment and public funding of the Corporation for Public Broadcasting, 47 U.S.C. §396(a) (*e.g.*, "public television and radio stations and public telecommunications services constitute valuable local community resources for utilizing electronic media to address national concerns and solve local problems through community programs. . . it is in the public interest for the Federal Government to ensure that all citizens of the United States have access to public telecommunications services [which includes noncommercial educational and cultural television programs] through all appropriate available telecommunications distribution technologies") 47 U.S.C. §§ 396(a)(8) and (9); 397(14).

[58]47 U.S.C. §535(a).

[59]47 U.S.C. §336(b)(3).

[60]S. Rep. No. 230, 104th Congress, 2d Sess. at 161 (1996).

[61]*See also Ancillary and Supplementary Use of Digital Television Capacity by Noncommercial Licensees*, 14 FCC Rcd 537 (1998) (stating that § 336 "does not distinguish between commercial and noncommercial DTV licensees, nor does the legislative history . . .").

[62]AAPTS Comments at 51.

this matter is tied to the dual carriage issue, we decline to address the merits of AAPTS's Grade B argument at this juncture.

IV. RETRANSMISSION CONSENT ISSUES

24. Section 325 contains the Act's retransmission consent provisions.[63] The law governing retransmission consent generally prohibits cable operators and other multichannel video programming distributors from retransmitting the signal of a commercial television station unless the station whose signal is being transmitted consents or chooses mandatory carriage.[64] Every three years, analog commercial television stations must elect to either grant retransmission consent or pursue their mandatory carriage rights.[65]

25. The *Notice* raised numerous issues related to retransmission consent that can be resolved in this *Report and Order*. The issues are as follows: (1) whether separate retransmission consent/must carry elections are permitted for the analog and digital signals of a broadcast station;[66] (2) whether the timing of the election cycle must be modified; (3) whether a broadcaster may agree to partial carriage of its digital signal;[67] (4) whether the digital replacement signals for analog superstations should be treated as new signals for purposes of the retransmission consent provisions or should have the same status as the ones they replace;[68] (5) whether to extend the prohibition on analog exclusive retransmission consent agreements to the digital context;[69] (6) whether the Commission should prohibit analog-digital signal tying arrangements; and (7) the status of NCE stations under Section 325.

26. **Separate Analog and Digital Carriage Agreements.** Prior to the *Notice* in this docket, many broadcasters commented that the retransmission consent process should apply separately to the analog and digital broadcast signals. Commenters argued that separate must carry/retransmission consent elections should be allowed.[70] In the *Notice*, we renewed this inquiry.[71] NAB argues that a television station is entitled to separate elections because of the different level of bargaining power between the broadcaster and the cable operator with regard to each signal.[72] NCTA asserts that a broadcaster's digital signal is not entitled to must carry rights during the transition: therefore, as long as a licensee is transmitting an analog signal, its digital signal can only be carried pursuant to retransmission consent. NCTA states that, in this respect, the digital signal is no different from any other signal, such as a distant

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[63] 47 U.S.C. §325(b)(1).

[64] 47 U.S.C. §§325(b)(1)(A), (B).

[65] 47 U.S.C. §325(b)(3)(B).

[66] *DTV Must Carry Notice*, 13 FCC Rcd. at 15111.

[67] *Id.*

[68] *Id.* at 15112.

[69] *Id.*

[70] Broadcaster Comments to *Fourth FNPRM in MM Dkt. No. 87-268* at 33.

[71] *DTV Must Carry Notice*, 13 FCC Rcd at 15111.

[72] NAB Comments at 41; *see also* ALTV Comments at 16.

television signal, that has no must carry rights; for those signals, as well as the transitional digital signal, the Act simply does not provide for a choice.[73]

27. With regard to those stations that simultaneously broadcast analog and digital television signals, we conclude that a broadcaster is permitted to treat the two differently for carriage purposes. That is, a television station may choose must carry or retransmission consent for its analog signal and retransmission consent for its digital signal.[74] This policy permits the same broadcaster to negotiate a retransmission consent agreement for some or all of its digital signal, if that is what it desires. Our decision here is intended to further the digital transition because we believe cable operators would be more willing to carry certain streams of digital content or ancillary or supplementary data if it is offered by a particular television station, even if that station chose must carry for its analog signal. We believe this scenario would be precluded if we were to prohibit a station from making such a selection.

28. We also find that DTV-only stations may choose either retransmission consent or mandatory carriage like their analog counterparts. The retransmission consent rules and regulations contained in Section 76.64 would likewise apply to digital broadcast television signals.

29. **Modification of the Election Cycle** In the *Notice*, we indicated that the Act requires local commercial television stations to elect either must carry or retransmission consent on a triennial basis.[75] We noted that new television stations can make their initial election anytime between 60 days prior to commencing broadcast and 30 days after commencing broadcast with the initial election taking effect 90 days after it is made.[76] We asked whether the existing cycle should be altered to accommodate the introduction of digital television or if we should apply the current "new station" rule to digital signals.[77] Pappas submits that a station commencing digital operations during the middle of an election cycle should be treated as a new station and permitted to make its election for the DTV transmission at any time between the 60th day prior to commencement of such transmissions and the 30th day thereafter. We believe that the Commission's existing new station rules should be used in the digital carriage context. The existing requirements are non-controversial and both cable operators and broadcasters are well accustomed to their use. Thus, for television stations broadcasting only a digital signal, the current rules applicable to new analog signals would apply. Our holding here would also apply to new digital-only noncommercial television signals, even though they are not specifically covered by Section 76.64 of the Commission's rules.

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[73]NCTA Reply Comments at 25.

[74]This policy approach is taken under Section 325(b)(1)(A) of the Act, rather than Section 325(b)(1)(B), because we do not resolve the dual carriage question as this time.

[75]*Digital Must Carry Notice*, 13 FCC Rcd. at 15111 (*citing* 47 U.S.C. §325(b)(3)(B) (". . . television stations, within one year after the date of enactment of the Cable Television Consumer Protection and Competition Act of 1992 and every three years thereafter, make an election between the right to grant retransmission consent under this section and the right to signal carriage under section 614 [47 U.S.C. §534]."); and 47 C.F.R. §§76.64(f)(1) and (2) (providing that the first election must be made by June 17, 1993 and subsequent elections at three year intervals, the second by October 1, 1996 to take effect January 1, 1997, the third by October 1, 1999 to take effect January 1, 2000, and so on)).

[76]*Id.* (*citing* 47 C.F.R. §76.64(f)(4)).

[77]*Id.*

30. **Retransmission Consent Agreements for Partial Digital Signal Carriage.** In the *Notice*, we recognized that in the analog context "any broadcast station that is eligible for must carry status, although it may be carried pursuant to a retransmission consent agreement must . . . be carried in the entirety, unless carriage of specific programming is prohibited . . . pursuant to our rules."[78] We stated, however, that it may be desirable to allow partial carriage of digital signals pursuant to the retransmission consent process if that is what the parties agree to.[79] ALTV argues that permitting cable operators to negotiate for partial carriage of DTV signals would place broadcasters in an untenable position because cherry picking of programming would harm the underlying economics of free, over-the-air television.[80] Morgan Murphy asserts that, in the event a broadcaster elects a multicasting format for its DTV signal, retransmission consent should apply to the entire digital signal not for each programming stream.[81]

31. We conclude that for purposes of promoting the transition and encouraging voluntary cable carriage of broadcast digital signals when a television station chooses retransmission consent, the broadcaster and cable operator may negotiate for partial carriage of a local digital television signal.[82] We believe that this policy, which applies to digital-only television stations and television stations with both analog and digital signals, will benefit both parties and help to accomplish the Congressional goal of transitioning to digital television. In this instance, the broadcaster gains access to cable subscribers for some part of its signal, and the cable operator can conserve channel capacity and carry that programming which it believes subscribers will want. We note that this policy is a departure from the Commission's analog carriage rules that require a cable operator to carry local television signals in their entirety.[83] In interpreting the statute in 1994, the Commission noted that the statutory language would appear to permit broadcasters to negotiate with cable operators for retransmission consent for any part of their signal.[84] The Commission found that some negotiated partial carriage was clearly permitted based upon the language in Section 325 but concluded that, as a matter of policy, the statutory provisions should be read in concert to require carriage of "must-carry qualified stations" in their entirety even in the context of retransmission consent.[85] We adopt a different approach here because the statute gives the Commission flexibility to devise new rules for digital carriage when necessary.[86] We believe that in the case of digital

[78]*Id. (citing* 47 C.F.R. §76.62(a)); *see also Must Carry Reconsideration*, 9 FCC Rcd. at 6745.

[79]*DTV Must Carry Notice*, 13 FCC Rcd. at 15111.

[80]ALTV Comments at 18.

[81]Morgan Murphy Comments at 16.

[82] "Partial" carriage may be considered in any number of ways, including hours, bits or programming streams.

[83]See 47 C.F.R. §76.62(a). In 1994, the Commission interpreted Section 325 to provide that broadcasters may bargain with cable operators for the right to carriage of any part of the broadcast signal only when such station is not eligible under the provisions of Section 614, either because it is not a local commercial broadcast signal or it does not qualify for mandatory carriage. *See Must Carry Reconsideration*, 9 FCC Rcd. at 6745.

[84] *Id.* (Comparing Section 325(b)(1) with Section 614(b)(3)(b)).

[85] *Id.*

[86] *See* 47 U.S.C. § 614(b)(4)(B) (requiring the Commission to establish changes in the signal carriage requirements to ensure cable carriage of digital broadcast signals). *See also Must Carry Reconsideration*, 9 FCC Rcd. at 6745 ("Congress recognized the interplay between [Sections 325 and 614] and gave the Commission authority to fill in the regulatory gaps.").

signal carriage, the provisions should be read to permit the parties to freely negotiate for partial carriage in the context of retransmission consent. The goal of facilitating the transition to digital signals is furthered by this interpretation because cable operators are likely to negotiate retransmission consent agreements with more stations if carriage of something less than the full complement of a broadcaster's digital signal is permitted. This outcome may accelerate the digital transition in many markets. In arriving at this determination, we considered that prohibiting partial carriage in the context of retransmission consent would not only discourage voluntary carriage of programming subject to mandatory carriage, but would also be likely to preclude the carriage of desirable programming streams or data services that are not subject to mandatory carriage. We do not find "cherry picking" to be a major concern, as ALTV believes, as long as the cable operator has the broadcaster's permission to select which programming will be carried. We conclude that permitting partial carriage in the context of retransmission consent is appropriate at least for the duration of the transition. When the transition is completed or substantially underway, we can consider whether partial carriage continues to be necessary to facilitate carriage of digital signals over the long term.

32. **Retransmission Consent Exemption for Superstations.** Section 325(b)(2)(D) exempts cable operators from the obligation to obtain retransmission consent from superstations[87] whose "signals" were available by a satellite or common carrier on May 1, 1991.[88] This provision's legislative history states that an exemption from retransmission consent was necessary "to avoid sudden disruption to established relationships" between superstations and satellite carriers.[89] United Video has explained that the exemption permits it to continue to uplink superstations signals and transmit them to cable operators and other facilities-based multichannel video providers.[90] We will treat the digital signals of superstations the same as their analog signals for retransmission consent purposes. If the analog signal was exempt from Section 325, it follows that the station's digital signal is also exempt. We believe that maintaining the status quo and tracking the Act's original intent will permit video program distributors to continue to uplink superstation signals and provide them to cable operators and their subscribers. This policy may speed the transition, and the purchase of digital television equipment, because cable operators may transmit digital superstations into markets where a full array of digital television services may be lacking.

33. **Prohibition on Exclusive Agreements.** In the *Must Carry Order*, we specifically prohibited exclusive retransmission consent agreements between television broadcast stations and cable operators.[91] Congress recently codified the Commission's exclusive retransmission consent prohibition as one of the many amendments to Section 325 under the SHVIA.[92] The Act now states that a broadcaster cannot enter into an exclusive retransmission consent arrangement with any MVPD until 2006.[93] We have

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[87]A superstation is a television broadcast station other than a network station, licensed by the Commission that is secondarily transmitted by a satellite carrier. 47 C.F.R. §76.64(c)(2).

[88]47 U.S.C. §325(b)(1).

[89]*S. Rep. No. 102-92* at 27.

[90]United Video Comments to *Fourth FNPRM in MM Dkt. No. 87-268* at 5.

[91]*See Must Carry Order,* 8 FCC Rcd. at 3006. Section 76.64(m) of the Commission's rules provides that "exclusive retransmission consent agreements are prohibited. No television broadcast station shall make an agreement with one multichannel distributor for carriage, to the exclusion of other multichannel distributors." 47 C.F.R. §76.64(m).

[92]*See* 47 U.S.C. §325(b)(2)(C)(ii).

[93]*Id.*

recently implemented the statutory ban on exclusive arrangements.[94] Consistent with the new provision and rule, we apply the current prohibition on exclusive retransmission consent agreements to negotiations involving the carriage of digital television broadcast signals until January 1, 2006.

34. **Retransmission Consent Tying Arrangements.** With regard to retransmission consent and its effect on small cable operators, the *Notice* asked whether the Commission should prohibit "tying" arrangements, in which the broadcaster requires the operator to carry the broadcaster's digital signal as a precondition for carriage of the analog signal.[95] The Small Cable Business Association ("SCBA") states that unregulated analog retransmission consent demands, and tying in particular, pose a major threat to small cable's financial viability.[96] To remedy the situation, SCBA urges the Commission to prohibit broadcasters from tying analog carriage to digital carriage.[97]

35. While we acknowledge the important concerns raised by SCBA, we will not adopt rules specifically prohibiting tying arrangements at this time. In coming to this conclusion, we recognize that substantial evidence must be presented to support a claim that a tying arrangement exists and that the operator suffers harm as a result. Without proof to support the case, it is difficult for the Commission to formulate an appropriate remedy. We also note that broadcasters now must bargain in good faith with small cable operators, or any other MVPD, under recent revisions to the retransmission consent rules pursuant to amendments promulgated under the SHVIA.[98] One example of a bargaining proposal presumptively consistent with the good faith negotiation requirement is a proposal for carriage of the analog broadcast signal conditioned on carriage of any other broadcaster-owned programming stream, such as the digital signal.[99] While such arrangements are now permitted, we will continue to monitor the situation with respect to potential anticompetitive conduct by broadcasters in this context. If, in the future, cable operators can demonstrate harm to themselves or their subscribers due to tying arrangements, we will be in a better position to consider appropriate courses of action.

36. **NCE Stations.** Section 325 of the Act expressly states that NCE stations do not have retransmission consent rights.[100] As such, an NCE station cannot withhold its signal from being carried by any MVPD. An NCE station, however, is free to negotiate with cable systems and other MVPDs for voluntary carriage.[101] In the digital context, an NCE station may multiplex its digital signal and air several video programming streams at once. In this regard, we note that an NCE station, because it is not covered by Section 325, may enter into an exclusive digital carriage arrangement for any service it may offer or

[94]*See Implementation of the Satellite Home Viewer Improvement Act of 1999, Retransmission Consent Issues*, First Report and Order, 15 FCC Rcd 5445 (2000) ("Retransmission Consent Order")

[95]*DTV Must Carry Notice*, 13 FCC Rcd. at 15118.

[96]SCBA Comments at 24. SCBA is now known as American Cable Association ("ACA").

[97]*Id.*; a*ccord* Pellegrin Comments at 6.

[98]*See Retransmission Consent Order*, 15 FCC Rcd at 5449-5473.

[99]*Id.* at 5469.

[100]47 U.S.C. §325(b)(2)(A) ("The provisions of this subsection shall not apply to—retransmission of the signal of a noncommercial broadcasting station.")

[101]We note that Time Warner recently reached an agreement with AAPTS with regard to the carriage if digital television signals of certain NCE stations. *See Public Television and Time Warner Cable Agree to Digital Carriage*, Press Release, September 19, 2000.

any programming stream that is not subject to a mandatory carriage requirement under Section 615 and our findings herein. Against this backdrop, we expect cable operators and other MVPDs to participate in discussions with NCE stations concerning the voluntary carriage of their digital broadcast signals.

V. DIGITAL BROADCAST SIGNAL CARRIAGE REQUIREMENTS

A. Channel Capacity

37. **Definition.** Section 614(b)(1)(B) provides that a cable operator, with more than 12 usable activated channels, shall not have to devote more than "one-third of the aggregate number of usable activated channels"[102] for the carriage of commercial television stations.[103] Despite this language, there is some dispute as to how the terms "usable activated channels" and "cable system capacity" should be defined in the digital context.[104] We requested comment on the definition of "usable activated channels" for digital television carriage purposes. We noted that many cable operators now have, or soon will have, the technical ability to fit several programming services into one 6 MHz cable channel. Thus, we asked how advances in signal compression technology should affect the definition of channel capacity.[105] We also asked whether the one-third channel capacity requirement for digital broadcast television carriage purposes means one-third of a cable operator's digital channel capacity or one-third of all 6 MHz blocks, including both the analog and digital channels.[106]

38. ALTV states that the Commission should consider the operator's total cable channel capacity for determining its carriage obligations.[107] In contrast, Paxson and Sinclair urge that for purposes of defining the term "usable activated channels," each channel should be a 6 MHz block of spectrum.[108] They also state that by defining the cable channel as a 6 MHz block and requiring such a channel to be made available to each local commercial station, the Commission will ensure the cable distribution of all DTV signals transmitted by the respective licensees. Golden Orange states that most broadcasters will likely engage in some form of multicasting and the requirement of a 6 MHz block will ensure the cable carriage of a diversity of signals.[109] On a different track, Morgan Murphy and Pappas assert that the capacity of digital cable systems should be determined based on data throughput, *i.e.,* bits per second of useful digital data.[110]

39. Under the Act, a cable operator must make available for signal carriage purposes up to one-third of its usable activated channels. Because of the development of digital signal processing and

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[102]47 U.S.C. §534(b)(1)(B); 47 C.F.R. §76.56(b)(1).

[103]In the *DTV Must Carry Notice*, we noted that the one-third capacity limit found in Section 614(b)(1)(B) applies in the digital context. 13 FCC Rcd. at 15117.

[104]*Id.* at 15120.

[105]*Id.*

[106]*Id.*

[107]ALTV Comments at 61.

[108]Paxson Comments at 28; Sinclair Comments at 6.

[109]Golden Orange Comments at 6.

[110]Morgan Murphy Comments at 12; Pappas Comments at 28.

signal compression technologies, the number of video services carried on a cable system is no longer a simple calculation and may change dynamically over time depending on the amount of motion in the video content, the amount of compression that takes place, and whether the service in question is carried in a standard or high definition digital format. We have taken these developments into consideration in revising the channel capacity determination.

40. The channel capacity calculation can be made by taking the total usable activated channel capacity of the system in megahertz and dividing it by three.[111] One third of this capacity, defined in megahertz, is the limit on the amount of system spectrum that a cable operator must make available for commercial broadcast signal carriage purposes. Carriage requests would then have to be accommodated to the extent of this limit in whatever format and by whatever technique is appropriate and is otherwise consistent with the rules. We believe, out of the options presented in the *Notice*, this is the easiest for the operator to calculate. While a calculation based on programming or bits may be possible, both are more difficult than the megahertz method to quantify cable capacity for purposes of the one-third statutory cap. In a digital environment, as cable operators reallocate spectrum from analog to digital, the digital programming and bit carrying capacity of the cable system changes.[112] Therefore, neither programming nor bits provide a constant that can easily be applied to determine channel capacity. In contrast, the number of megahertz employed by a cable system stays constant and does not vary as the allocation of spectrum from analog to digital progresses.

41. To determine the one-third cap for broadcast signal carriage purposes, the first step is to determine the number of "usable activated channels" on the cable system. "Activated channels" would continue to be defined by Section 76.5(nn), per Section 602(1) of the Act, as those channels engineered at the headend of a cable system for the provision of services generally available to residential subscribers of the cable system, regardless of whether such services actually are provided, including any channel designated for public, educational or governmental use.[113] "Usable activated channels," would continue to be defined by Section 76.5(oo), per Section 602(19) of the Act, as those activated channels of a cable system, except those channels whose use for the distribution of broadcast signals would conflict with technical and safety regulations.[114] Thus, this calculation includes but is not limited to the cable spectrum used for internet service, pay-per-view and video-on-demand, and telephony. Next, the number of usable activated channels is expressed in megahertz and then divided by three to determine the one third cap. For example, if a cable system's downstream operation begins at 54 MHz and continues through 550

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[111]Megahertz ("MHz") is a unit of frequency denoting one million Hertz or one million cycles per second and is closely tied to bandwidth. The telecommunications bandwidth is typically measured in Hertz for analog communications. For example, an analog NTSC television channel occupies a bandwidth of 6 MHz. In digital communications, bandwidth is typically measured in bits per second identified by a specific method of encoding. For example, an HDTV channel encoded in 8 VSB, would occupy a digital bandwidth of about 19.4 megabits per second ("mbps") which, in turn, would require a 6 MHz bandwidth. In digital cable operations, where a 64 QAM encoding technique is used, that same 6 MHz bandwidth can provide up to 27 mbps of digital bandwidth. That would mean a 6 MHz bandwidth in such a cable system can carry a 19.4 mbps HDTV channel and still be able to provide other video or data services with the remaining 7.6 megabits in that same 6 MHz bandwidth. *See also Newton's Telecom Dictionary*, 11th ed., July 1996.

[112]The concept of bits and bit rates is applicable to digital programming signals, but not to analog programming signals. Thus, there is no way to express the part of a cable system's capacity attributable to analog programming in terms of bits.

[113]47 C.F.R. §76.5(nn); 47 U.S.C. §522(1).

[114]47 C.F.R. §76.5(oo); 47 U.S.C. §522(19).

MHz, but 50 MHz is unactivated, the total amount of usable channels on a system-wide basis is 446 MHz (i.e. 550 MHz-54 MHz-50 MHz). One-third of this figure, approximately 149 MHz in this example, is the maximum amount of megahertz to be used for the carriage of local commercial television signals for such a system. A cable operator must provide each local television station that is entitled to mandatory carriage with a sufficient amount of capacity to carry its primary digital video signal. The amount of capacity devoted to carriage purposes for each television station will change as an operator upgrades to a digital cable standard.[115]

42. **Carriage Priority.** In the *Notice*, we recognized that when the one-third capacity limit has been reached, Section 614(b)(2) provides that "the cable operator shall have discretion in selecting which such stations shall be carried on its cable system."[116] We tentatively concluded that this statutory directive would continue to apply in the digital context.[117] In the alternative, we asked whether it would be desirable to adopt carriage priority rules.[118] ALTV, Trinity, and Univision emphasize that if the one-third cap remains in place, a station's analog signal should not be displaced in order to accommodate a DTV signal.[119] Sinclair asserts that in those instances in which carriage of all analog and DTV stations would occupy more than one-third of such cable systems' capacity, the Commission should forbear from applying this limit and require full carriage of these broadcast signals.[120] We find that the Act provides a cable operator with discretion to choose which signals it will carry if it has met its carriage quota. Thus, a cable operator should be able to select which signals to carry above the one-third limit. Under the existing carriage structure,[121] all local commercial television signals that are carried, whether they have chosen retransmission consent or must carry, are counted as part of the one-third cap calculation. This policy of counting retransmission consent stations will continue to apply in the digital carriage context.

43. **NCE Stations.** We recognize that the carriage of NCE stations is not included in the one-third statutory cap. Instead, a cable operator's carriage obligations are based on the number of channels on a particular cable system. Generally, cable systems with 12 or fewer activated channels shall carry 1 qualified NCE;[122] cable systems with 13-36 channels shall carry up to 3 qualified NCEs; and cable systems with 36 or more activated channels shall carry 3 or more qualified NCEs.[123] We see no reason to depart from the existing rules regarding NCE carriage. As such, cable systems with the capacity to carry 36 or more channels will be required to carry 3 or more qualified NCE stations, subject to the other provisions of the Act and our rules.

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[115]For example, a cable operator with an analog-based cable system would devote 6 MHz of bandwidth to the carriage of a high definition television signal, but a cable operator using the 64 QAM digital format may only have to devote 4 MHz to the carriage of that same high definition signal.

[116]*DTV Must Carry Notice*, 13 FCC Rcd. at 15117 (*citing* 47 U.S.C. §534(b)(2)).

[117]*Id.*

[118]*Id.*

[119]ALTV Comments at 49, n. 129; Trinity Comments at 8; and Univision Reply Comments at 10.

[120]Sinclair Comments at 7.

[121]*See Must Carry Order*, 8 FCC Rcd. at 3003.

[122]As stated earlier, a qualified NCE is one that places a Grade B contour over the principal headend of the cable system or the cable system's principal headend is within 50 miles of the NCE's city of license.

[123]47 U.S.C. §§535(b)(2), (3); 47 U.S.C. §535(e).

B. Signal Quality

44. Section 614(h) of the Act specifies that, to qualify for carriage, stations must deliver a good quality signal to the principal headend of the cable system.[124] For local commercial television stations, this is defined as a signal level of –45dBm for UHF signals and –49dBm for VHF signals.[125] The Act delegated to the Commission the authority to establish good quality signal criteria for low power television stations[126] and for qualified local noncommercial educational television stations.[127] We held that the commercial television station definition of good quality signal be applied in the same manner to noncommercial and LPTV television stations under the UHF/VHF paradigm.[128]

45. In the *Notice*, we asked whether the signal quality standards established for analog signals are relevant for digital signals or whether new parameters for good signal quality should be established.[129] No commenters addressed this issue. Absent comment for or against either alternative, we undertook our own analysis relying on the digital engineering methods and expertise developed in other proceedings.[130] We note that in adopting the digital television transmission standard, the Commission recognized the differences between analog and digital television signals. The analog NTSC transmission standard is engineered so that even when a station's signal strength slowly decreases, a television set is still able to display the video and audio components, albeit at a degraded level. On the other hand, under the DTV transmission standard, as the station's signal level decreases, the digital television set continues to display a good picture, but then may abruptly turn blue when the signal strength drops below a certain threshold.[131] Against this backdrop, we believe it is necessary to develop a new reception standard aptly suited to the new digital technology used to transmit digital television signals.

46. We conclude that the signal level necessary to provide a good quality digital television signal at a cable system's principal headend is –61 dBm. We continue to believe that the principal headend[132] should remain the location for signal quality testing purposes because that is the single location where all available signals can be uniformly measured and compared. We arrive at this minimum signal level by using the following planning factors:[133]

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[124] 47 U.S.C. §534(h)(1)(B)(iii).

[125] *Id.*

[126] 47 U.S.C. §534(h)(2)(D).

[127] 47 U.S.C. §535(g)(4).

[128] *Must Carry Order*, 8 FCC Rcd. at 2988.

[129] *DTV Must Carry Notice*, 13 FCC Rcd. at 15119-15120.

[130] *See, e.g., DTV Sixth Report and Order*, 12 FCC Rcd. 14588.

[131] This is known as the "cliff effect." That is, if a signal is received, a good quality picture can be constructed at the television receiver; however, once the signal falls below a minimum signal level threshold, no picture can be reconstructed or displayed by the television receiver. There are, however, certain receiver implementation schemes which allow the receiver to display and hold the last picture received before the signal fell below the threshold.

[132] 47 C.F.R. §76.5(pp).

[133] *See DTV Sixth Report and Order*, 12 FCC Rcd. at Appendix A.

Thermal Noise in 6 MHz bandwidth	N_t	-106.2 dBm
Receiver Noise Figure	N_f	10.0 dB
Required Carrier to Noise Ratio	C/N	15.2 dB
Propagation and implementation margin	M	20.0 dB
Receiver input	$= (N_t+N_f+C/N+M) =$	-61 dBm

We believe that providing for a 20 dB propagation variability and signal impairment margin ("margin") above the minimum signal-to-noise ratio is sufficient to handle most over the air transmission disturbances encountered by a DTV signal at a cable system headend. These disturbances will likely include signal impairments such as multipath, impulsive (manmade)[134] noise, and co-channel and adjacent channel interference. The video and audio quality of a digital television signal remain good as long as the signal-to-noise ratio is in excess of the minimum signal-to-noise ratio applicable to the transmission system after consideration of the summation of all noise factors (such as channel and manmade noise, noise generated by multipath cancellation, receiver noise, and co-channel interference). The tradeoff table in Section 73.623(c)(3)(ii) is an example of the relationship of signal margin to one type of interference: analog signals on the same frequency.[135] The table shows that, as the margin increases, the strength of the desired signal can be much less when compared to the strength of the interfering signal, and still produce good quality video and audio. The primary source of erosion of the signal margin will be propagation variations of the received signal level with time. These variations result in what is generally called signal fading. However, we believe that these variations of the received signal level and the amount of signal impairments cumulatively, should be significantly less than the allowed 20 dB margin. We believe that when a signal level of -61 dBm is delivered to the cable system headend, the signal will be of sufficient strength that the cable operator can deliver a good quality picture to its subscribers. A television station that does not agree to be responsible for the costs of delivering to the cable system a signal of good quality, under the revised standard, is not eligible for carriage.[136]

C. Content of Signals Subject to Mandatory Carriage

47. We now address the specific content of a digital television signal that is subject to the mandatory carriage obligation. We note that analog broadcast stations generally have one video broadcast product. That is, only a single program is broadcast at a time and that program is the main feature of the broadcast. Only a relatively minor amount of communications capacity is available apart from that program transmission. Some capacity is available in the vertical blanking interval ("VBI") for the transmission of communications that are separate from, but related to, the principal video output or are unrelated to that content. The related content is typically closed captioning and program rating information. The unrelated content would be typified by videotext or data-type communications.

48. Digital television stations will operate on a much more flexible basis. The system described in the ATSC DTV Standard includes discrete subsystem descriptions, or "layers," for video source coding and compression, audio source coding and compression, service multiplex and transport, and RF/transmission.[137] In addition to being able to broadcast one, and under some circumstances two,

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[134]Manmade noise includes all radio noise generated by noise sources located in the vicinity of the receiver, such as electrical transmission lines, automobile ignitions, and electrical motors.

[135]47 C.F.R. §73.623(c)(3)(ii).

[136]*See* 47 U.S.C. §534(h)(1)(B)(iii) (stating the same for analog signals).

[137]*See* ATSC Digital Television Standard, Doc. A/53.

high definition digital television programs, the standard allows for multiple streams, or "multicasting," of standard definition digital television programming at a visual quality better than the current NTSC analog standard. Multiple programming streams may be broadcast at the same time or with a variety of data streams accompanying the main video content. These data streams may be either associated with the video content in some manner or completely separate from it.[138]

49. A critical component of digital broadcast television is the program and system information protocol ("PSIP").[139] This is the standard protocol for transmission of the relevant data tables, describing system information and event descriptions, contained within digital packets carried in the digital broadcast transport stream multiplex. System information allows navigation of, and access to, each of the channels within the transport stream, whereas event descriptions give the user content information for browsing and selection. PSIP is composed of four main tables: (1) system time table; (2) ratings region table; (3) master guide table; and (4) virtual channel table.[140] The latter table is of particular importance in the carriage context because it contains a list of all the channels that are or will be on-line, plus their attributes. Among the attributes are the channel name, navigation identifiers, and stream components and types. PSIP allows the broadcaster to customize information to guide viewers to channel numbers they are familiar with.

50. **Primary Video.** In the analog context it is clear that a cable operator subject to a mandatory carriage obligation is not required to carry all of the communications output of a television broadcast station. Three provisions of the Act provide the main focus of the arguments regarding this question in the context of digital broadcast signal carriage. First, Section 614(b)(3) of the Act entitled "Content to be Carried," states that a cable operator shall carry in its entirety the "primary video" of the station.[141] Second, it requires carriage of the "accompanying audio" and "line 21 closed caption transmission" of each station.[142] Third, the operator must carry "to the extent technically feasible, program-related material carried in the vertical blanking interval or on subcarriers."[143] The statute is specific that "Retransmission of other material in the vertical blanking interval or other nonprogram-related material (including teletext and other subscription and advertiser-supported information services) shall be at the discretion of the cable operator."[144] Section 614 is applicable to the carriage of commercial stations. Largely parallel provisions are contained in Section 615 relating to the carriage of noncommercial stations.[145] In addition to the provisions that are not specific to digital television broadcasting, Section 336(b)(3) of the Act which has specific applicability to "advanced television

[138]Geocast, Iblast, and Dtcast are some of the companies planning to use a certain amount of digital television spectrum to provide high speed data broadcast services to personal computers. *See*, *e.g.*, T. Butts, *Disney, GE invest in Dotcast*, www.digitalbroadcasting.com, November 8, 2000.

[139]PSIP is a requirement for broadcasters using the ATSC standard, however, it is not required by the Commission.

[140]For a more complete description of PSIP, *see* J. Whitaker and B. Benson, *The Standard Handbook of Video and Television Engineering*, 3rd Ed., McGraw Hill.

[141]47 U.S.C. §534(b)(3).

[142]*Id.*

[143]*Id.*

[144]*Id.*

[145]47 U.S.C. §535(g)(1).

services" provides that "no ancillary or supplementary service shall have any right to carriage under section 614 or 615."[146]

51. In the *Notice*, we asked how we should define "primary video" if a broadcaster chooses to broadcast multiple standard definition digital television streams, or a mixture of high definition and standard definition digital television streams, as is permitted under the rules.[147] We sought input on which video programming services provided by a licensee should be considered primary and should be entitled to carriage if the primary video includes less than all of the streams of programming broadcast.[148] We asked whether the definition should be flexible, allowing the broadcaster to choose which transmissions it considers being primary.[149]

52. Many commenters argue for an expansive approach to the classification of primary video during the transition that would include much of a broadcaster's digital programming. ALTV argues that if a licensee broadcasts several channels of free over-the-air standard definition programs, all of these channels should be considered to be the primary video transmission of the station. NAB states that there can be no primary or main program since carriage of a full broadcast signal, including multiplexed program streams, will enable a viewer to switch between channels within a given program.[150] AAPTS asserts that all "mission-related" programming streams transmitted by a public television station should be regarded as primary and subject to mandatory carriage.[151] Ameritech argues to the contrary, that the statutory language limiting must carry to a broadcaster's primary video indicates that Congress did not intend to require cable operators to carry all the material a station transmits. Time Warner argues that a station's analog signal is the primary video during the transition and only when a broadcaster surrenders its analog frequency and engages exclusively in digital transmissions will its digital signal become the "primary video" transmission and thus eligible for any post-transition must carry requirements adopted by the Commission.[152]

53. We recognize that the terms 'primary video' as used in sections 614(b)(3) and 615(g)(1) are susceptible to different interpretations. Because the terms are not expressly defined in the Act, to determine the meaning, we analyze the terms 'primary video' within their statutory context, consider the legislative history, and examine the technological developments at the time the must carry provisions were enacted.

54. The term primary video, as found in Sections 614 and 615 of the Act, suggests that there is some video that is primary and some that is not.[153] In this instance, we rely on the canon of statutory

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[146]47 U.S.C. §336(b)(3). Section 336(a)(2) provides that the Commission shall allow the holders of licenses for advanced television service stations "to offer such ancillary or supplementary services . . . as may be consistent with the public interest, convenience, and necessity."

[147]*See*, *e.g.*, *DTV Fifth Report and Order*, 12 FCC Rcd at 12826.

[148]*DTV Must Carry Notice*, 13 FCC Rcd at 15125.

[149]*Id.*

[150]NAB Comments at 38.

[151]AAPTS Comments at 36.

[152]Time Warner Comments at 51; *see also* NCTA Comments at 14-15.

[153]47 U.S.C. §§534(b)(3) and 535(g)(1).

construction that effect must be given to every word of a statute and that no part of a provision will be read as superfluous.[154] Here, we must give effect to the word "primary." The dictionary definitions of "primary" are "First or highest in rank, quality, or importance" and "Being or standing first in a list, series, or sequence."[155] Based on the plain words of the Act, we conclude that, to the extent a television station is broadcasting more than a single video stream at a time, only one of such streams of each television station is considered "primary." The choice as to which, among several possible video programming streams, should be considered primary is a decision left to the broadcaster.

55. The legislative history does not definitively resolve the ambiguity regarding the intended application of the term 'primary video' as used in this context. The legislative history does indicate, however, that the must carry provisions were not intended to cover all uses of a signal. Specifically, the legislative history provides that '[c]arriage of other program-related material in the vertical blanking interval and on subcarriers or other enhancements of the primary video and the audio signal (such as teletext and other subscription and advertiser-supported information) is left to the discretion of the cable operator.'[156] The legislative history further states that the 'Committee does not intend that this [must carry] provision be used to require carriage of secondary uses of the broadcast transmission, including the lease or sale of time on subcarriers or the vertical blanking interval for the creation or distribution of material by persons or entities other than the broadcast licensee.'[157]

56. We note that the incorporation of the primary video construct into the Act in 1992 was reasonably contemporaneous with the gradual change in common understanding of the new television service from ATV (advanced television) and HDTV (high definition television)—which focused on improving the technical quality of traditional analog NTSC television—to DTV (digital television) with the ability to broadcast high definition television, SDTV (standard definition television) with multicasting possibilities, as well as the broadcast of non-video services.[158] Although silent on the issue of

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[154] *See* Sutherland, Statutory Construction, Vol. 2A, at Section 46.06 ("Each word given effect").

[155] *See* The American Heritage Dictionary of the English Language, Third Edition (1996); and Black's Law Dictionary (1983 edition) (Primary is defined as: "First; principal; chief; leading. First in order of time, or development, or in intention."). We note that Time Warner also states that "primary" means "first in rank or importance" according to Webster's Third New International Dictionary. Time Warner Comments at 29. In response to some broadcasters' suggestions that two signals can simultaneously be "first in rank or importance, " Time Warner argues that such a stance is contemptuous of the clear text of the statute. *Id.*

[156] H.R.Rep.No. 102-628, 102nd Cong., 2nd Sess. 1992.

[157] *Id.*

[158] *See e.g., FCC Puts U.S. on Schedule For HDTV Broadcasting By 2000*, Video Technology News, Sept. 28, 1992, Vol. 5, No. 20 (quoting then FCC Commissioner Sherrie Marshall, 'I am becoming increasingly convinced that the real key to broadcasters' continued competitiveness lies not so much in ATV as a crisp picture, but in its potential for spectrum-efficient multiplexing'); *FCC and Broadcasters Battle Toward Flexible HDTV Conversion*, Broadcasting & Cable, Oct. 5, 1992 (according to then FCC Chairman Alfred Sikes, the drive toward digital TV is not based on 'just better pictures and improved sound.' Such a 'flexible digital system ... will mean innovative video. For instance, the signal could carry multiple scenes and camera angles or multiple programs. Smart receivers would allow viewers to decide which to select'); *Do Not Be Weak-Kneed, Sikes Tells Broadcasters At Conference On HDTV*, HDTV Report, Oct. 14, 1992, Vol. 2, No. 21 (Fox Inc.'s Executive Vice President noted during a panel discussion that his network views digital broadcasting as a 'real potential avenue for opportunities. Once you are able to transmit a digital signal ... and perform simulcast requirements, you can do pretty much whatever else you wish to do with that channel ... including additional programs'); *Pay TV Grows Up After Two Decades, HBO is Still Pushing the Envelope on Cable TV*, Boston Herald, Dec. 20, 1992 ('One idea HBO hopes will help it to compete is something called multiplexing. Instead of receiving just one HBO channel, multiplex subscribers can find the

(continued….)

multiplexing, the legislative history indicates that Congress understood that HDTV was "not limited to improved resolution clarity, and color parity in a television image, or large television sets." Rather, Congress recognized that "[t]his advanced technology has the potential to open new and expanded markets for the components of advanced television systems (such as semiconductors, fiber optics, and flat screen displays), and to enhance the integration of the television and computer industries."[159]

57. Based on the record currently before us,, we conclude that "primary video" means a single programming stream and other program-related content. With the advent of digital television, broadcast stations now have the opportunity to include in their video service a panoply of program-related content. Indeed, far more video content is possible broadcasting a digital signal than broadcasting in an analog format. For example, a digital television broadcast of a sporting event could include multiple camera angles from which the viewer may select. The statute contemplates and our rules require that cable operators provide mandatory carriage for this program-related content. In contrast, if a digital broadcaster elects to divide its digital spectrum into several separate, independent and unrelated programming streams, only one of these streams is considered primary and entitled to mandatory carriage. The broadcaster must elect which programming stream is its primary video, and the cable operator is required to provide mandatory carriage to only such designated stream. While we do not believe that Congress specifically contemplated programming of the type described above (i.e., data or video that is separate from but associated with the primary video) in drafting Section 614(b)(3), the policies underlying this Section are consistent with our conclusion here in the context of digital signal carriage. Based on the language in 614(b)(3), Congress was concerned that mandatory carriage be limited to the broadcaster's primary program stream but also include related content as described here.[160] In the FNPRM we seek comment on the appropriate parameters for "program-related" in the digital context.

58. **Ancillary and Supplementary Services**. Section 336 of the Act provides that "no ancillary or supplementary service shall have any right to carriage under section 614 or 615."[161] Neither the Act nor the legislative history define the terms 'ancillary or supplementary.' Section 614(b)(3) of the Act requires cable operators to carry "to the extent technically feasible, program-related material carried in the vertical blanking interval or on subcarriers" but states that "[r]etransmission of other material in the vertical blanking interval or other nonprogram-related material (including teletext and other subscription and advertiser-supported information services) shall be at the discretion of the cable operator."[162] We sought comment on possible ancillary and supplementary definitions that were consistent with the language of Section 614(b)(3). Paxson states that the Commission should limit the definition of ancillary or supplementary services to those for which viewers pay subscription fees or for which the broadcaster receives compensation from non-advertising third parties, thereby establishing mandatory carriage for

(…continued from previous page)
network's programming on additional channels - HBO2 and HBO3. The movies and specials are all the same, but the viewer has three different program options at once, much like a multiscreen theater').

[159] H.R.Rep. 101-1026, 101st Cong., 2nd Sess. 1990 at 133-134.

[160] *See* revisions to Section 76.62 in Appendix D.

[161] 47 U.S.C. §336(b)(3). Section 336(a)(2) provides that the Commission shall allow the holders of licenses for advanced television service station "to offer such ancillary or supplementary services . . . as may be consistent with the public interest, convenience, and necessity."

[162] *See* 47 U.S.C. §534(b)(3).

free over-the-air local multicasting.[163] On the other hand, Time Warner argues that all digital video programming, other than the "main" signal which the Commission requires the broadcaster to transmit, are ancillary and supplementary.

59. With respect to the definition of ancillary and supplementary services, the Commission's *DTV Fifth Report and Order* states that ancillary and supplementary services include "any service provided on the digital channel other than free, over-the-air services."[164] Section 73.624(c) of the Commission's rules specifies that "any video broadcast signal provided at no direct charge to viewers shall not be considered ancillary or supplementary."[165] While not defining the class exhaustively, Section 73.624(c) indicates that ancillary and supplementary services include, but are not limited to, "computer software distribution, data transmissions, teletext, interactive materials, aural messages, paging services, audio signals, [and] subscription video [video programming for which the broadcaster charges a fee]. . . ."[166] Section 73.646 of the Commission's rules states that telecommunications services provided on the vertical blanking interval ("VBI") or in the visual signal, in either analog or digital mode, are ancillary.[167] Based on the foregoing, we find that the services specified in Sections 73.624(c) and 73.646 are ancillary or supplementary in the context of digital cable carriage and are not entitled to mandatory carriage.

60. In addition, we believe there may be certain services associated with broadcast digital video programming, while not ancillary or supplementary, would still not entitled to mandatory carriage because they are not program related. Currently, in addition to a broadcaster's primary analog video programming, Section 614(b)(3) requires cable operators to carry "to the extent technically feasible, program-related material carried in the vertical blanking interval or on subcarriers . . ."[168] However, "[r]etransmission of other material in the vertical blanking interval or other nonprogram-related material (including teletext and other subscription and advertiser-supported information services) shall be at the discretion of the cable operator." In the analog context, we have specified certain factors for determining what material carried in the VBI is sufficiently program-related as to qualify for must carry rights.[169] Due to the technical differences between digital and analog transmission, *e.g.*, there is no VBI in a digital signal, the foregoing concepts cannot transfer directly into a digital environment. What is anticipated is that a television station will provide internet-based services, such as e-commerce applications, to the public. While this type of business plan promises to enhance a television station's digital presence, the carriage of internet offerings by a cable operator likely would not be required under the must carry provisions unless the broadcaster can demonstrate that such material should be considered program-related.

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[163]Paxson Comments at 27.

[164]*DTV Fifth Report and Order*, 12 FCC Rcd at 12821 (establishing the DTV transition schedule and related requirements); *on reconsideration* 14 FCC Rcd 19931 (1999).

[165]47 C.F.R. §73.624(c).

[166]*Id.*

[167]47 C.F.R. §73.646; *see also DTV Fifth Report and Order*, 12 FCC Rcd at 12821, n. 54.

[168]47 C.F.R. §76.62(f).

[169]*Must Carry Reconsideration*, 9 FCC Rcd. at 6734 (adopting in part factors set forth in *WGN Continental Broadcasting, Co. v. United Video, Inc.*, 693 F.2d 622 (7th Cir. 1982)) ("WGN").

61. In this vein, we note that there are certain over-the-air digital services sufficiently related to the broadcaster's primary digital video programming that are entitled to carriage. These include, but are not limited to, closed captioning information, program ratings data for use in conjunction with the V-chip functions of receivers, Source Identification Codes ("SID Codes") used by Nielsen Media Research in the preparation of program ratings, and the channel mapping and tuning protocols that are part of PSIP. These services provide useful information to viewers, broadcasters, and/or cable operators, and are intended for use in direct conjunction with the programming.[170] In general, we will continue to use the same factors enumerated in *WGN*, that are used in the analog context to determine what material is considered program-related.[171] The *WGN* court set out a three-part test for making a determination. First, the broadcaster must intend for the information in the VBI to be seen by the same viewers who are watching the video signal. Second, the VBI information must be available during the same interval of time as the video signal. Third, the VBI information must be an integral part of the program. The court in *WGN* held that if the information in the VBI is intended to be seen by the viewers who are watching the video signal, during the same interval of time as the video signal, and as an integral part of the program on the video signal, then the VBI and the video signal must both be carried if one is to be carried.[172]

62. As noted, digital signals do not contain a VBI. The Commission's rule in Section 76.56(e) describes what cable systems may carry in the VBI. This subsection is revised to revise the reference to VBI to take account of digital technology.[173]

63. **Program Guides**. We sought comment on the status of advanced programming retrieval systems and other digital channel selection devices that filter and prioritize video programs for viewers.[174] To prevent anticompetitive conduct by cable operators, Gemstar urges the Commission to require the undisturbed pass-through of electronic program guide ("EPG") related information as part of the broadcaster's digital transmission.[175] NCTA claims that Gemstar provides no evidence that Congress intended to force cable operators to deliver any non-programming information that might be transmitted along with a broadcaster's digital signal.[176] Ameritech and BellSouth state that there is no legal basis for

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[170]We note that independent of the "program related" and "ancillary or supplementary" concepts, cable operators are required to pass through closed captioning data contained in analog and digital video programming. 47 C.F.R. §§76.606, 79.1(c). We further note that while the Commission has refrained from promulgating regulations requiring delivery of the codes necessary for operation of the "V-chip," it has done so based upon the voluntary assumption of this responsibility by video program distributors. *In the Matter of Technical Requirements to Enable Blocking of Video Programming based on Program Ratings, Report and Order*, 13 FCC Rcd 11248, 11259 (1998).

[171]693 F.2d at 624-25. The Commission declined to further define "program-related," apart from the WGN analysis, noting that carriage of information in the VBI was rapidly evolving. *Must Carry Order*, 8 FCC Rcd at 2986.

[172]*Id.*

[173] *See* revised Section 76.56(e) in Appendix D.

[174]*DTV Must Carry Notice*, 13 FCC Rcd at 15129.

[175]Gemstar Comments at 10-14. The Broadcast Group agrees with Gemstar, but states that the Commission should impose a rule that (1) prohibits cable systems from excluding any local broadcast station from, or from otherwise discriminating against any local broadcast station in, any EPG or navigation device provided by the system; and (2) requires cable systems to provide an EPG that contains a non-discriminatory listing of all programming services available on the system. Broadcast Group Comments at 22.

[176]NCTA Reply Comments at 22. *See also* Time Warner Reply Comments at 34 (stating that the Act flatly precludes must carry rights for broadcasters' EPGs because they are not program related.)

the Commission to give program guides any greater carriage rights than any other ancillary or supplementary service that must obtain carriage through private negotiations with individual cable operators.

64. We find that the carriage of program guide information is a matter to be addressed under Sections 614(b)(3) and 615(g)(1) of the Act. As stated earlier, all program-related broadcast material found in the analog signal's VBI must be carried, unless it is technically infeasible for the operator to do so.[177] In the digital television context, there is no VBI for EPG information to be carried on, rather, the EPG data would be part of the PSIP. [178] In this circumstance, we find that program guide data that are not specifically linked to the video content of the digital signal being shown cannot be considered program-related, and, therefore, are not subject to a carriage requirement.

65. **Program Access.** Section 336 of the Act states that "no ancillary or supplementary service shall . . . .be deemed a multichannel video programming distributor for purposes of section 628." Section 628 contains the program access requirements pursuant to which multichannel video programming distributors are entitled to purchase on nondiscriminatory rates, terms, and conditions satellite-delivered cable programming in which a cable operator has an attributable interest.[179] In the *Notice*, we sought comment on the meaning of this language.[180] We find that this provision was intended to prevent a digital broadcaster from asserting rights under the program access provisions contained in Section 628. This provision affords certain rights to MVPDs, which are defined as entities who make "available for purchase, by subscribers or customers, multiple channels of video programming."[181] We hold that Section 336 precludes a digital television station offering video services for a fee from asserting MVPD status under our rules and claiming program access rights pursuant to Section 628.

D. Duplicative Signals

66. Section 614(b)(5) of the Communications Act provides that "a cable operator shall not be required to carry the signal of any local commercial television station that substantially duplicates the signal of another local television station which is carried on the cable system, or to carry the signals of more than one local commercial television station affiliated with a particular broadcast network . . ."[182] A parallel rule applies to the carriage of NCE station signals.[183] Congress enacted these provisions to

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[177]*Must Carry Order*, 8 FCC Rcd at 2986.

[178]We note that in the analog carriage context, Gemstar has requested a ruling from the Commission that its electronic program guide is program-related and must be carried by cable operators. *See* Gemstar Int'l Group. Ltd. and Gemstar Development Corp., *Petition for Special Relief Seeking Commission Order to Discontinue Stripping Information from Broadcast VBI*, Public Notice, DA 00-670 (rel. March 24, 2000).

[179]47 U.S.C. §548(a); 47 C.F.R. §§76.1000-1004.

[180]*DTV Must Carry Notice*, 13 FCC Rcd at 15125.

[181]47 C.F.R. §76.1000(e).

[182]47 U.S.C. §534(b)(5).

[183]*See* 47 U.S.C. §535(b)(3)(C) and (e).

preserve a cable operator's editorial discretion while ensuring that the public has access to a diversity of local television signals.[184]

67. In the *Notice*, we recognized the import of the duplication provisions and sought comment on what approach the Commission should take with regard to this matter.[185] In response, NCTA argues that in Section 614(b)(5), Congress intended that a cable operator not be compelled to carry duplicative signals.[186] NCTA also notes that Section 614 defines a local station as a "television broadcast station. . . . licensed and operating on *a channel* regularly assigned to its community. . . ."[187] Because the digital transmission takes place on a channel separate from the analog channel, NCTA asserts that two stations, not one, are in operation during the transition and that Section 614(b)(5) should apply to programming duplicated by a broadcaster on its digital signal. UCC, emphasizes that Congress enacted Section 614(b)(5) in order to "preserve the cable operator's discretion while ensuring access by the public to diverse local signals."[188] UCC asserts that when a broadcaster's digital programming merely duplicates its analog programming, mandatory carriage of the duplicative digital programming reduces the diversity of local signals by forcing the cable operator to drop cable programming in order to free capacity, thereby undermining Congress' goals.[189] The Broadcast Group, however, argues that identical program content transmitted in an analog and digital format constitutes two distinct program forms targeted at different audiences and that the Commission should not treat it as duplicative programming.[190] Pappas maintains that the Commission should not construe the limitation on duplicative signals to refer to the content of a program transmitted by a signal, but rather to refer to the signal itself.

68. We recognize that reaching a conclusion on this matter is complicated by our requirements for the digital transition. The Commission established a staged implementation schedule for the introduction of digital television in the rules governing the transition. In the early stages of the transition, broadcasters have flexibility in selecting the digital programming they offer. The Commission refrained from imposing simulcasting requirements during this phase in order to afford broadcasters the freedom to experiment with program and service offerings.[191] Thus, for example, a broadcaster's initial digital programming may be entirely original, it may simply duplicate a certain amount of its analog programming, or it may combine original digital content with analog content. Beginning April 1, 2003, the rules mandate an increasing level of duplication of program content between the analog and digital signals, eventually reaching a 100% simulcasting requirement which continues until a broadcaster's analog channel is terminated and returned to the Commission.[192]

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[184]S. Rep. No. 92, 102d Cong., 1st Sess. at 85 (1991).

[185]*DTV Must Carry Notice*, 13 FCC Rcd at 15123.

[186]NCTA Comments at 12-13.

[187]NCTA Reply Comments at 19 (quoting 47 U.S.C. § 534(h)(1)(A)).

[188]UCC Comments at 8 (citation omitted).

[189]*Id.*; *see also* NCTA Reply Comments at 16.

[190]Broadcast Group Comments at 10.

[191]*DTV Fifth Report and Order*, 12 FCC Rcd at 12832.

[192]*Id.* These simulcasting requirements are intended to minimize viewer disruption as the content of the analog signal is slowly replicated on the digital signal.

69. We will not revise the duplication definitions and requirements at this time. More information is needed on the digital programming currently made available by broadcasters before we act in this regard. Such information, which is solicited in the *FNPRM*, will enable us to determine the appropriate duplication definitions to apply during the transition period, when two signals of the same station are available over-the-air, and afterwards. In the meantime, we will continue to administer the duplication requirements set forth in the Act and the Commission's rules.[193] That is, two commercial television stations will be considered to substantially duplicate each other "if they simultaneously broadcast identical programming for more than 50 percent of the broadcast week."[194] For purposes of this definition, identical programming means the identical episode of the same program series.[195] With regard to noncommercial television broadcasters, an NCE station does not substantially duplicate the programming of another NCE station if at least 50 percent of its typical weekly programming is distinct from programming on the other station either during prime time or during hours other than prime time.[196] This rule is applicable to digital-only and analog noncommercial stations during the transition period as well.

E. Material Degradation

70. Section 614(b)(4)(A) of the Act discusses the cable operator's treatment and processing of analog broadcast station signals and provides that the signals of local commercial television stations shall be carried without material degradation.[197] The *Notice* asked to what extent this provision precludes cable operators from altering the digital format of digital broadcast television signals when the transmission is processed at the system headend or in customer premises equipment.[198] Under the Act, the Commission's carriage standards must ensure that, "to the extent technically feasible, the quality of signal processing and carriage provided by a cable system for the carriage of local commercial television stations will be no less than that provided by the system for carriage of any other type of signal."[199] To address this provision, the *Notice* sought comment on whether the Act requires an operator to carry all local commercial television stations that broadcast in a 1080I high definition format if it carries a cable programming service such as HBO in the 1080I HDTV format.[200]

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[193]We note that duplication in this context may encompass the following situations: (1) DTV-only station v. DTV-only station; (2) DTV-only station v. analog station; or (3) analog station v. analog station.

[194]*Must Carry Order*, 8 FCC Rcd at 2981.

[195]*Id.* at 2970.

[196]47 C.F.R. §76.56(a)(1)(iii). *See also*, *Must Carry Order*, 8 FCC Rcd at 2970. In the cable carriage context, the Commission treated the duplication provisions of Sections 615(b)(2) and Section 614(b)(5) separately. The Commission noted that the two provisions were intended to accommodate different situations and are addressed separately in the statute and its legislative history. *Id.* at 2980.

[197]47 U.S.C. §534(b)(4)(A). *See also* 47 U.S.C. §535(g)(2) ("A cable operator shall provide each qualified local noncommercial educational station whose signal is carried in accordance with this section with bandwidth and technical capacity equivalent to that provided to commercial television stations carried on the cable system and shall carry the signal of each qualified local noncommercial educational television station without material degradation"); 47 C.F.R. §76.62(b)-(d).

[198]*DTV Must Carry Notice*, 13 FCC Rcd at 15122.

[199]*See* 47 U.S.C. §534(b)(4)(A). *See also* 47 U.S.C. §535(g)(2).

[200]*DTV Must Carry Notice*, 13 FCC Rcd at 15123.

71. We note that the Advanced Television Systems Committee ("ATSC") DTV Standard adopted by the Commission was recommended by the Advisory Committee on Advanced Television Service ("ACATS") and developed by the Grand Alliance.[201] It provides for 19.4 megabits per second ("mbps") for each 6 MHz channel over-the-air.[202] The Commission neither adopted a single standard for high definition television nor imposed a HDTV requirement on broadcasters.[203] Rather, the Commission drew the distinction between standard definition ("SDTV") and high definition ("HDTV") in the digital context. The electronics industry and ATSC define high definition television as having a vertical display resolution of 720p, 1080I, or higher; an aspect ratio capable of displaying a 16:9 image at the minimum resolution level; and receiving and reproducing Dolby digital audio.[204] In contrast, standard definition digital displays resolution lower than high definition, requires no specific ratio, and produces "usable" audio and picture.[205]

72. NAB argues that a digital signal would be materially degraded if it were not transmitted to the viewer in the format that the broadcaster intended.[206] MSTV states that cable systems should not be permitted to block or delete any of the bits comprising the free over the air broadcast material.[207] Granite adds that if cable operators are not required to pass through the entire digital signal, the ability of viewers to receive and experience higher quality television programming formats will be reduced.[208] We believe that these arguments do not address the fundamental concern of the prohibition against material

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[201] *DTV Fourth Report and Order*, 11 FCC Rcd at 17772-4. The Grand Alliance was consortia of equipment manufacturers, including AT&T and General Instruments, working together to develop DTV standards.

[202] *Id.* at 17789.

[203] *See DTV Fifth Report and Order*, 12 FCC Rcd at 12809, 12826-27.

[204] **ATSC Restates Definitions for HDTV and SDTV Transmission Standards**, Press Release (Feb. 20, 1998) at http://www.atsc.org/Presshtml/PR_Def.html ("The Executive Committee of the Advanced Television Systems Committee has approved for release the following statement regarding the identification of the HDTV and SDTV transmission formats within the ATSC Digital Television Standard: "There are six video formats in the ATSC DTV standard which are High Definition. They are the 1080 line by 1920 pixel formats at all picture rates (24, 30 and 60 pictures per second), and the 720 line by 1280 pixel formats at these same picture rates. All of these formats have a 16:9 aspect ratio.";*DTV Fifth Further Notice of Proposed Rule Making*, 11 FCC Rcd. 6235, 6237 (1996) ("DTV Fifth FNPRM") (Noting that 720-line and 1080-line formats represent high resolution video). Both high-resolution formats use a picture aspect ratio of 16 units horizontally by 9 units vertically. The choices of 1280 pixels per line for the 720-line format and 1920 pixels per line for the 1080-line format result in square pixels for both formats, based on the 16:9 aspect ratio. "I" designates "interlaced" scanning and "P" designates "progressive" scanning. Progressive scanning lines are presented in succession from the top of the picture to the bottom, with a complete image sent in each frame as is commonly found in computer displays today. For interlaced scanning, which also is used in NTSC (analog) television, odd and even numbered lines of the picture are sent consecutively, as two separate fields. These two fields are superimposed to create one frame, or complete picture, at the receiver. The interlace picture rates can be 24, 30 or 60 fields per second. *Id.* at 11 FCC Rcd at 6237-38. *See also* CEA Expands Definitions for DTV Products, www.digitalbroadcasting.com, September 6, 2000 (Definitions, which now allow for DTV to be defined in the 4:3 aspect ratio standard, are expected to be incorporated into new products in time for holiday buying season)

[205] http://www.dtvweb.org; and *DTV Fifth FNPRM*, at 11 FCC Rcd at 6237.

[206] NAB Comments at 40.

[207] MSTV Comments at 30.

[208] Granite Broadcasting at 9.

degradation. From our perspective, the issue of material degradation is about the picture quality the consumer receives and is capable of perceiving and not about the number of bits transmitted by the broadcaster if the difference is not really perceptible to the viewer. Such an interpretation is consistent with the language of the Act, which applies to *material* degradation, not merely technical changes in the signals.[209] Moreover, as discussed above, the Act prohibits mandatory carriage for ancillary or supplementary services[210] and our rules provide that material that is not program-related is not subject to the mandatory carriage requirement.[211] If such bitstream material that is not subject to mandatory carriage is subtracted from the entire 6 MHz over-the-air digital signal, by necessity there will be fewer than 19.4 mbps to be carried on the cable system. Moreover, whenever a digital signal is remodulated for carriage on a cable system, fewer bits are needed than to transmit the signal over the air.[212] Thus, it is inappropriate to use 19.4 mbps, or any specific number of bits, to denote what constitutes a degraded signal. The number of bits appropriate for mandatory carriage will vary based on the programming and service choices of each broadcaster.

73. With regard to defining picture quality for digital carriage purposes, Microsoft advocates that the Commission should require only that cable operators not carry non-broadcast signals at a higher quality than broadcast signals.[213] Pappas argues, however, that a subscriber watching a HDTV digital program on cable should see the same quality picture as a consumer watching a HDTV digital program over-the-air.[214] Adelphia argues that as long as high definition broadcast signals are retransmitted in either the 1080I or 720p format, the alteration of the digital television signal's format does not constitute material degradation.[215] We agree with Microsoft and find that language of the Act provides the answer to the material degradation question. Section 614(b)(4)(A) requires that cable operators shall provide the same "quality of signal processing and carriage" for broadcasters' signals as they provide for any other type of signal. Consequently, in the context of mandatory carriage of digital broadcast signals, a cable operator may not provide a digital broadcast signal in a lesser format or lower resolution than that afforded to any digital programmer (e.g., non-broadcast cable programming, other broadcast digital program, etc.) carried on the cable system, provided, however, that a broadcast signal delivered in HDTV must be carried in HDTV.[216] This result also protects the interests of cable subscribers by focussing on

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[209]47 U.S.C. §534(b)(4)(A). This interpretation is also consistent with the Act's general mandate of ensuring that cable operators do not favor their own cable programming video services over those video services provided by broadcasters.

[210]47 U.S.C. §336(b)(3).

[211]*See* 47 C.F.R. §76.62(e).

[212] A broadcaster's over-the-air HDTV signal, for example, requires 19.4 mbps, which accounts for both the programming or data, as well as an overhead data stream that includes error correction. When a cable system carries this HDTV signal using QAM modulation, it removes the broadcaster's overhead data stream and replaces it with the overheada stream appropriate for the specific cable system. Generally the resulting bit rate is somewhat less than 19.4. This reduction in bit rate does not affect picture quality and is not considered material degradation.

[213]Microsoft Comments at 24.

[214]Pappas Comments at 19-20.

[215]Adelphia et. al. Comments at 31.

[216] We recognize that it may be especially burdensome for small systems with limited channel capacity (such as systems with fewer than 330 MHz) to carry a HDTV signal if they are not otherwise providing any HDTV programming. In this regard, we note that mandatory carriage is limited to one-third of the cable system's capacity, as defined *infra*. We also recognize that carriage of a HDTV signal using 8 VSB pass-through may require the

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the comparable resolution of the picture, as visible to a consumer, rather than the number of lines or bits transmitted, which may not make a viewable difference on a consumer's equipment.

74. We also find that for purposes of supporting the ultimate conversion to digital signals and facilitating the return of the analog spectrum, a television station may demand that one of its HDTV or SDTV television signals be carried on the cable system for delivery to subscribers in an analog format. We do not believe the conversion of a digital signal to an analog format under these specific and temporary circumstances is precluded by the nondegradation requirement in sections 614(b)(4)(A) and 615(g)(2). Many cable subscribers do not yet have television sets capable of receiving or displaying digital signals in their fully advanced format. Thus, if we were to mandate digital-to-digital transmission at this stage of the transition period, cable subscribers would be unable to properly receive the signals. Obviously this was not the intended goal of the nondegradation requirement in sections 614(b)(4)(A) and 615(g)(2). Allowing digital-to-analog conversion for a limited time during a critical stage of the transition period will further the digital transition because a television station would be more willing to return its analog spectrum to the government, and convert to digital service, knowing that cable subscribers without digital equipment may still be able to view the relevant programming. We recognize, that permitting digital-to-analog conversion will not provide an impetus for cable subscribers to purchase digital television sets, but will allow new digital stations and stations that return their analog spectrum to continue to reach cable subscribers who have only analog receivers while commencing over-the-air service to attract and reach non-cable viewers who purchase digital television sets. With these points in mind, we will allow a television station to provide one of its digital signals to cable systems in an analog format only during the early stages of the transition period. We will revisit this policy after 2003 to ensure that this policy is fostering the conversion to digital television service and to determine when equipment is available so that broadcast signals can be delivered and carried in digital format.[217] As the transition moves forward, television broadcast stations will be required to deliver their signals in digital format and cable operators will be required to carry them in digital format, as discussed above.

75. **Measurement.** The *Notice* asked what standards and measurement tools were available to address disputes relating to the quality of the digital broadcast television signal.[218] We also asked how, and where, degradation should be measured. To determine if an operator is materially degrading a digital signal, the signal should be tested at the input terminal of either the television set or set-top box if the subscriber owns that piece of equipment. The signal should be tested at the output point of the set top box if the subscriber rents that equipment from the cable operator. We believe that this location, rather than the headend, will best capture the signal's strength and characteristics after being processed by the cable

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allocation of more than 6 MHz of bandwidth due to the difference in channel alignments between broadcast over-the-air transmission and cable carriage. An 8-VSB pass-through of a broadcast station may straddle two cable channels and result in the loss of additional channels in the system (i.e., the cable operator is not able to use these additional channels to carry other programming). Therefore, if a small system, which is not otherwise carrying any HDTV signals, is required to carry a broadcast signal in HDTV such that it straddles two channels in this way, it may include all of its lost spectrum when calculating its one-third capacity.

[217] We understand that for some time the technology has been available to manufacture cable boxes that can either deliver a digital signal to the subscriber's digital equipment or downconvert the signal to be displayed on analog equipment. *See, e.g.,* AT&T *ex parte* of October, 1999. Apparently there is not as yet sufficient demand to produce these boxes for retail purchase or for rental from the cable operator. We will monitor the market's progress to ensure that our permission for analog conversion at the headend does not interfere with the marketplace availability of such boxes.

[218] *DTV Must Carry Notice*, 13 FCC Rcd at 15122.

plant. Broadcasters and cable operators may use commercially available devices to detect signal degradation. We do not endorse any particular model, but stress that such equipment must meet sound engineering practices and good equipment specifications.

76. **Digital Modulation Techniques.** We are mindful that digital television signals are transmitted in the 8 VSB[219] digital broadcast modulation technique while operators will use either 64 or 256 QAM[220] as the cable digital modulation technique. Both 64 and 256 QAM likely will provide cable operators with a greater degree of operating efficiency than does 8 VSB, and also permits the carriage of a higher data rate, with less bits devoted to error correction, when compared with the digital broadcast system. Therefore, we will permit cable operators to remodulate digital broadcast signals from 8 VSB to 64 or 256 QAM.[221] We will not require cable operators to pass through 8 VSB. Notwithstanding this conclusion, we believe that cable pass-through of a digital broadcast signal without alteration is an option for allowing the first purchasers of digital television sets to receive digital signals from their cable systems. Under this scenario, the 8 VSB signal could pass through the cable system and the cable set- top box without change and connect to the digital television set, or the cable could bypass the set-top box and be connected to a cable coaxial connection on the digital television receiver. We believe that pass-through is an option for operators of certain cable systems[222] that wish to offer subscribers digital broadcast channels, but recognize in the long term, that pass-through is not an effective solution for the majority of cable systems.

F. Set Top Box Availability

77. In the *Notice*, we observed that the Act mandates that all commercial television signals shall be provided to every subscriber of a cable system and be viewable on all television receivers of subscribers that are connected by the cable operator or for which the cable operator provides a

[219]VSB is a form of amplitude modulation in which one sideband of the main modulated signal and a small part of the other sideband of the same signal are transmitted. The 8 VSB standard has been optimized for terrestrial broadcast television delivery where transmission errors and data loss are likely. The current analog television standard also uses VSB.

[220]Quadrature amplitude modulation, or QAM, is a complex modulation technique, using variations in both signal phase and amplitude. We note that 256 QAM has a 38 Mpbs data rate while 64 QAM has a 27 Mbps data rate.

[221]The ATSC standards on which the 8 VSB digital television broadcasting system is based, involved the participation of the cable industry. It was anticipated in the ATSC process that non-broadcast digital video program providers would be using a 16 VSB modulation system. Although cable operators are now using QAM, rather than VSB, it was clearly contemplated throughout the process that the cable industry and the broadcasting industry would not be using the same modulation technique. On this point MediaOne (now part of AT&T Broadband) states that the conversion from VSB to QAM causes no degradation of broadcast digital video quality; rather the same quality signal the station delivers to the headend will be received by cable subscribers with digital television receivers. MediaOne Comments at 12. *See also* Mitsubishi Reply Comments at 10-11 (stating that the remodulation from VSB to QAM should be allowed). For purposes of Section 76.630 of our rules, we clarify that we do not consider the utilization of QAM modulation by a cable operator in the provision of digital cable television service to involve scrambling, encryption or similar technologies of the type referenced therein. *See* 47 C.F.R. § 76.630.

[222]This may be applicable to cable systems that will not be providing any digital cable programming or systems not wanting to incur the additional expense of 8 VSB to either 64 or 256 QAM conversion at the headend or in the set-top box.

connection.[223] In general, most cable subscribers are able to view analog broadcast stations on analog cable-ready television sets.[224] In the case of the new digital television service, the Commission has recently adopted labeling requirements for digital television receivers. Based on an industry agreement on technical standards, any receiver labeled as "Digital Cable Ready" will be "capable of receiving analog basic, digital basic, and digital premium cable television programming by direct connection to a cable system providing digital programming. . . . A security card (or POD) provided by the cable operator is required to view encrypted programming." [225] The digital cable ready receivers will include QAM demodulation capability. In the case of digital television receivers that do not meet the digital cable ready criteria, a subscriber may need a set top box to view broadcast digital signals delivered via cable.

78. In the *Notice*, we asked if the Act requires cable operators to offer set top boxes to every subscriber if digital television signals cannot be received without some device facilitating reception.[226] We also asked about viewing digital television signals on analog equipment. MediaOne states that Congress did not intend for all cable subscribers to incur substantial additional costs in order to ensure that all digital broadcast programming is viewable on their televisions, especially when most of the digital programming would be duplicative of the broadcaster's analog feed.[227] ALTV, on the other hand, believes that Section 614(b)(7) should be applied to digital signals in the same manner as it is applied to analog signals.[228]

79. We will not require a cable operator to provide subscribers with a set top box capable of processing digital signals for display on analog sets. We recognize that if we were to impose such a requirement, all subscribers would be forced to pay for equipment that converts digital programming that may be identical in content to the analog programming to which they already have access without a set top box. The result would be that subscribers without the capability of viewing digital signals and who will receive duplicate analog programming when the Commission's simulcasting requirements commence in 2003,[229] would be required to pay for a converter box to receive duplicate digital signals.[230] We do not believe that this result is what Congress intended in enacting section 614(b)(7).

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[223]*See DTV Must Carry Notice*, 13 FCC Rcd at 15126 *citing* 47 U.S.C. §534(b)(7). Section 615(h) provides that noncommercial educational stations, that are entitled to carriage, shall be "available to every subscriber as part of the cable system's lowest price service tier that includes the retransmission of local commercial television broadcast signals." 47 U.S.C. §535(h).

[224]Some cable subscribers have older televisions that are not capable of receiving all broadcast stations due to on-channel placement at a channel number beyond the range of the receiver. These subscribers rent a set-top box from the cable system for which the system may charge a monthly fee pursuant to 47 U.S.C. §543(b)(3)(A). *See also* 47 C.F.R. §76.923. *See also*, *Complaint of WLIG*, CSR 3903-M (Cab. Serv.Bur. rel. Nov. 10, 1993)(requiring the cable operator to provide boxes to subscribers so that they are able to view a local television broadcast signal).

[225]*See Compatibility Between Cable Systems and Consumer Electronics Equipment*, at ¶ 36. In this proceeding, the cable and consumer electronics industries are required to report on their progress concerning pending technical standards issues, including such standards for direct connection of DTV receivers to digital cable systems.

[226]*Digital Must Carry Notice*, 13 FCC Rcd at 15126.

[227]MediaOne Comments at 35.

[228]ALTV Comments at 71.

[229]*See* 47 C.F.R. §624(f)(1).

80. Furthermore, we believe that requiring cable operators to make available set top boxes capable of processing digital signals for display on analog sets might be inconsistent with section 629 of the Act. Section 629 was enacted to ensure the commercial availability of navigation devices, the equipment used to access video programming and other services from multichannel video programming systems.[231] Pursuant to our statutory mandate, we adopted rules to expand opportunities to purchase such equipment from sources other than the service provider.[232] Thus, to now require cable operators to make such equipment available to subscribers would impede the overarching goal of the Navigation Devices proceeding, that is to assure competition in the availability of set-top boxes and other customer premises equipment.[233] Moreover, we believe that as the digital television transition moves forward, subscribers will have the ability to purchase or lease a converter to permit the digital signal to be displayed on their analog televisions. We also expect that a conversion function is one which manufacturers may consider adding to digital set-top boxes. We note that the Commission's navigation devices rules allow manufacturers the ability to incorporate additional features and functions in set-top boxes, and to sell those boxes at retail.[234] As such, subscribers will be able to view both the analog and digital signals as the competitive market develops. Further, our decision ensures that the option to pay for a converter or digital set-top box with that function remains at the discretion of the cable subscriber and is not mandated through government regulation.

G. Channel Location

81. Section 614(b)(6) generally provides that commercial television stations carried pursuant to the mandatory carriage provision are entitled to be carried on a cable system on the same channel number on which the station broadcasts over-the-air.[235] Under Section 615(g)(5) noncommercial television stations generally have the same right.[236] The Act also permits commercial and noncommercial

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[230]On this point, NCTA comments that a strict interpretation of Section 614(b)(7) by the Commission would impose $53 billion to $93 billion ($400-$700 per sub.) in set top equipment costs on subscribers. NCTA Comments at 49

[231] 47 U.S.C. § 629.

[232]*Navigation Devices Report and Order*, 13 FCC Rcd. 14,775 (para 1) (1998).

[233] *Id.* at para 7.

[234]*See Commercial Availability of Navigation Devices*, Report and Order, 13 FCC Rcd 14775 at para. 49 (1998) ("Navigation Devices") (promulgating rules to facilitate the development and commercial availability of navigation equipment). *See also* 47 U.S.C. §544(a); 47 C.F.R. §§1200 et. seq.

[235]47 U.S.C. §534(b)(6); 47 C.F.R. §76.57(a). There are three channel positioning options for commercial television stations but only the on-channel option is relevant to the new digital signals. The other two options applicable to existing analog stations are the channel on which the station was carried on July 19, 1985 and the channel on which it was carried on January 1, 1992. These latter two channel positioning requirements are not suitable in the era of digital television. They are grounded in dates applicable only to analog broadcasters that were designed to ensure that subscribers would be able to find broadcast programming on familiar channel positions. Since digital signals are generally new products, there is no analogous supporting rationale for requiring digital channel positioning on any cable channel other than on a station's over-the-air channel. Moreover, each television station now has a different digital channel assignment under the Commission's new table of digital allotments. *See Sixth Report and Order*, 12 FCC Rcd. at 14699.

[236]47 U.S.C. §535(g)(5); 47 C.F.R. §76.57(b).

television stations to negotiate a mutually beneficial channel position with the cable operator.[237] In seeking comment on the applicability of these types of requirements in the digital context, we noted that station licensees received new digital broadcast frequency assignments and channel numbers that are different from their analog channel numbers.[238] We pointed out that the advent of advanced programming retrieval systems and other channel selection devices may alleviate the need for specific channel positioning requirements.[239] In this regard, the ATSC established channel identification protocols, or PSIPs,[240] that link the digital channel number with that assigned to the analog channel.[241] Given these developments, we asked whether the Commission should refrain from promulgating digital channel positioning requirements and allow technology to resolve the matter.[242]

82. Entravision and Granite submit that the analog channel positioning requirements should apply to DTV signals.[243] ALTV proposes that a cable operator should carry DTV signals on contiguous channels.[244] MSTV and NAB ask the Commission to rely on the ATSC PSIP standard.[245] NBC states that PSIP information or other DTV navigation instructions must be carried by cable operators for a channel mapping system to work.[246] Matsushita agrees and adds that should the Commission permit out-of-band methods to provide navigational information, the Commission should (1) require that cable systems transmit to the DTV set any and all the PSIP data contained in the digital broadcast signal without altering or limiting the effectiveness of that PSIP information and (2) mandate that PSIP be provided in an

[237]47 U.S.C. §534(b)(6), §535(g)(5).

[238]Thus, a television station could be assigned channel 4 as its analog over-the-air channel number, but channel 24 as its digital over-the-air channel number. A television station may switch back to channel 4 after the transition and "core" consolidation of broadcast signals to channels 2-51.

[239]*DTV Must Carry Notice*, 13 FCC Rcd. at 15128.

[240]*See Program and System Information Protocol for Terrestrial Broadcast and Cable*, ATSC Document A/65 (Dec. 23, 1997) ("For broadcasters with existing NTSC licenses, the major channel number for the existing NTSC channels, as well as the Digital TV channels, controlled by the broadcaster, shall be set to the current NTSC RF channel number. [ ] Assume a broadcaster who has an NTSC broadcast license for RF channel 13 is assigned RF channel 39 for Digital ATSC broadcast. That broadcaster will use major channel number 13 for identification of the analog NTSC channel on RF channel 13, as well as the digital channels it is controlling on RF channel 39.")

[241]*Id.*

[242]*DTV Must Carry Notice*, 13 FCC Rcd. at 15129. We also suggested that another policy alternative would be to allow operators to place digital television signals on any cable channel of their choice, subject to certain conditions, such as: (1) that the digital channel identification or PSIP information be clearly available for use by the subscriber's receiver; (2) that all analog and digital channel placement decisions must comply with tier placement requirements; and (3) once a station has been assigned a channel position, the cable operator may not move it from that position for at least three years except where a move is authorized by the broadcaster. *Id*

[243]Entravision Comments at 10; Granite Broadcasting at 11.

[244]ALTV Comments at 73.

[245]MSTV Comments at 32; NAB Comments at 41. *See ATSC Program and System Information Protocol for Terrestrial Broadcast and Cable*, Table 6.4 "Bit Stream Syntax for the Terrestrial Virtual Channel Table," at p. 20, and Table 6.8 Bit Stream Syntax for the Cable Virtual Channel Table," at p. 26 (12/23/97).

[246]NBC Comments at 6.

unscrambled, unencrypted form. In addition, the Commission should urge industry to adopt a single standard for out-of-band PSIP and other channel navigation information.[247]

83. In the digital environment it is generally anticipated that broadcast signals will be identified and tuned to through the PSIP information process rather than by identification with the specific frequency on which the station is broadcasting. Given the new digital table of allotments, we find that there is no need to implement channel positioning requirements for digital television signals of the same type currently applicable to analog signals. Rather, as the majority of commenters have suggested, we find that the channel mapping protocols contained in the PSIP identification stream adequately address location issues consistent with Congress's concerns about nondiscriminatory treatment of television stations by cable operators. We believe this technology-based solution will resolve broadcaster concerns. PSIP assures that cable subscribers are able to locate a desired digital broadcast signal and ensures that digital television stations are able to fairly compete with cable programming services in the digital environment. Therefore, as stated in the content-to-be-carried section above, a cable operator will be required to pass-through channel mapping PSIP information as it is considered to be program-related to the primary digital video signal.[248] We point out that questions related to the technical aspects of PSIP are being dealt with by the cable and consumer electronics industry as they proceed with establishing digital cable-consumer equipment compatibility standards. We note again that the Commission has asked for PSIP progress reports as part of the digital cable compatibility proceeding.[249]

H. Market Modifications

84. Commercial television stations have carriage rights throughout the market to which they are assigned by Nielsen Media Research.[250] Pursuant to Section 614(h)(1)(c) of the Act, at the request of either a broadcaster or a cable operator, the Commission may, with respect to a particular television broadcast station, include additional communities within its television market or exclude communities from such station's television market to better effectuate the purposes of the Act's must carry provisions.[251] In considering such market modification requests, the Act provides that the Commission shall afford particular attention "to the value of localism" by taking into account such factors as (1) whether the station, or other stations located in the same area, have been historically carried on the cable system or systems within such community; (2) whether the television station provides coverage or other local service to such community; (3) whether any other television station that is eligible to be carried by a cable system in such community in fulfillment of the requirements of this section provides news coverage of issues of concern to such community or provides carriage or coverage of sporting and other events of interest to the community; and (4) evidence of viewing patterns in cable and noncable households within the areas served by the cable system or systems in such community.[252] The inclusion of additional communities within a station's market imposes new must carry requirements on cable operators subject to the modification request while the grant to exclude communities from a station's market removes a cable operator's obligation to carry a certain station's signal on the relevant system. We sought comment on

[247] *Id.*

[248] *See* revisions to Section 76.57, Channel Positioning, in Appendix D.

[249] *See Compatibility Between Cable Systems and Consumer Electronics Equipment*, 15 FCC Rcd 8776.

[250] Nielsen has divided the United States into 210 designated market areas.

[251] 47 U.S.C. §534(h)(1)(C).

[252] 47 U.S.C. §534(h)(1)(C); 47 C.F.R. §76.59.

whether any change to the market modification process was warranted to accommodate the difference between analog and digital broadcasting.[253]

85. We find that our current reliance on Nielsen's market designations, publications, and assignments for analog signal carriage issues should continue for digital signal carriage issues. The presumption, therefore, is that the market of the station's digital signal is coterminous with the station's market area for its analog signal during the transition period.[254] In addition, we find that the statutory factors in Section 614(h), the current process for requesting market modifications, and the evidence needed to support such petitions, will be applicable to digital television cases during the transition period. We realize, of course, that the technical coverage area of a digital television signal may not exactly replicate the technical coverage area of the analog television signal. Therefore, in deciding DTV market modification cases, we will take into consideration changes in signal strength and Grade B contour coverage because of new digital television channel assignments and power limits. All other matters concerning the modification process for digital television signals will be decided on a case-by-case basis.

I. Digital Signal Carriage on PEG Channels

86. The Act provides that a cable operator required to add the signals of qualified local noncommercial educational stations and qualified low power television stations, respectively, may do so by placing such additional stations on unused public, educational or governmental ("PEG") channels not in use for their designated purposes, subject to the approval of local franchising authorities.[255] Pursuant to Section 611 of the Act, the local franchising authority, in discussions with a cable operator, determines how much channel capacity, if any, will be set aside for PEG use.[256] The Commission, when implementing the analog must carry rules, declined to adopt stringent requirements regarding the use of PEG channels for must carry purposes because it believed that these matters were more appropriately resolved by local franchising authorities.[257] We sought comment on whether DTV signals of NCE stations and LPTV stations should be allowed on PEG channels under the same framework accorded analog television signals.[258] We agree with comments submitted by CBA and Pappas that the carriage of digital LPTV and NCE stations on unused PEG channels should be permitted.[259] We find that this approach will likely advance the digital transition by allowing another way for cable subscribers to access digital NCE signals. We also find that continuing this policy will promote program diversity by enabling LPTV analog signals and NCE analog and digital signals, that otherwise may not be afforded carriage, to

[253] *DTV Must Carry Notice* at 15130.

[254] We note that in adopting technical rules for the digital transmission of broadcast signals, the Commission attempted to insure that a station's digital over-the-air coverage area would replicate as closely as possible its current over-the-air analog coverage area. *Sixth DTV Report and Order*, 12 FCC Rcd 14588, 14605 (1997).

[255] *See* 47 U.S.C. §535(d) (noncommercial educational television stations), §534(c)(2) (low power television stations); s*ee also* 47 C.F.R. §76.56(c).

[256] *See* 47 U.S.C. §531(d) ("In the case of any franchise under which channel capacity is designated [for PEG channels], the franchising authority shall prescribe (1) rules and procedures under which the cable operator is permitted to use such channel capacity for the provision of other services if such channel capacity is not being used for the purposes designated, and (2) rules and procedures under which such permitted use shall cease.")

[257] *Must Carry Order*, 8 FCC Rcd. at 2972, 2984.

[258] *DTV Must Carry Notice*,13 FCC Rcd. at 15126.

[259] CBA Comments at 5; Pappas Comments at 32.

reach their intended audience. To this end, we encourage local franchising authorities to engage digital public broadcasters and low power broadcasters in discussions concerning the carriage of their respective broadcast signals.

J. Complaints and Enforcement

87. Under our current rules, whenever a television station believes that a cable operator has failed to meet its must carry obligations, the station may file a complaint with the Commission.[260] Section 614(d)(3) requires the Commission to adjudicate a must carry complaint within 120 days from the date it is filed.[261] The Commission may grant the complaint and order the cable operator to carry the station or it may dismiss the complaint if it is determined that the cable operator has fully met its must carry obligations with regard to that station.[262] We sought comment on whether the current procedures should apply to DTV must carry complaints.[263] We agree with AAPTS that the current scheme is working and see no need to depart from it.[264] Therefore, we will continue to use the existing must carry complaint process for digital television carriage disputes.

VI. CHANGES TO OTHER PART 76 REQUIREMENTS

A. Open Video Systems

88. Section 653(c)(1) of the Act provides that any provision that applies to cable operators under Sections 614, 615 and 325, shall apply to open video system operators certified by the Commission.[265] Section 653(c)(2)(A) provides that, in applying these provisions to open video system operators, the Commission "shall, to the extent possible, impose obligations that are no greater or lesser" than the obligations imposed on cable operators.[266] The Commission, in implementing the statutory language, held that there are no public policy reasons to justify treating an open video system operator differently from a cable operator in the same local market for purposes of broadcast signal carriage.[267] Thus, OVS operators generally have the same requirements for the carriage of local television stations as do cable operators except that these entities are under no obligation to place television stations on a basic service tier.[268] OVS operators are also obligated to abide by Section 325 and the Commission's rules

[260] 47 C.F.R. §§ 76.7 and 76.61.

[261] 47 U.S.C. §534(d)(3).

[262] *DTV Must Carry Notice*, 13 FCC Rcd at 15131.

[263] *Id.*

[264] *See* AAPTS Comments at 54.

[265] 47 U.S.C. §573(c)(1).

[266] 47 U.S.C. §573(c)(2)(A).

[267] *See Implementation of Section 302 of the Telecommunications Act of 1996*, *Second Report and Order*, 11 FCC Rcd 18223, 18307-08 (1996).

[268] *Id.* at 18308-09, n.371. We note, however, that an OVS operator must make qualified local commercial and noncommercial educational television stations available to every subscriber. *See* 47 C.F.R. §76.1506(e).

implementing retransmission consent.[269] In the *Notice*, we asked whether digital carriage rules adopted for the cable industry should apply to OVS Operators,[270] to which Paxson commented in the affirmative.[271] Given the statutory directive to treat OVS operators like cable operators with regard to broadcast signal carriage, we find that OVS operators must carry digital-only television stations pursuant to this *Report and Order* and 76.1506 of the Commission's rules.

B. Subscriber Notification

89. Cable operators are required to notify subscribers of any changes in rates, programming services or channel positions.[272] When the change involves the addition or deletion of channels, each channel added or deleted must be separately identified.[273] We sought comment on how digital broadcast television carriage requirements will affect the notification provisions described above.[274] Pappas believes that cable systems should be required to notify subscribers whenever a DTV signal is added or analog is withdrawn, as specified in the Commission's current rules for system notification to subscribers of channel additions or deletions.[275] ALTV agrees, but adds that an operator should notify subscribers whenever an SDTV programming stream is available on the cable system.[276] We will require a cable operator to notify its subscribers whenever a digital television signal is added to the cable channel line-up or whenever such a signal is moved to another channel location. We will not require an operator to notify subscribers of the actual programming available on each possible SDTV digital stream, if such is carried under retransmission consent, because the mix of programs and services may change frequently. We find it would be unnecessarily burdensome for operators to constantly notify their subscribers, especially in large television markets where there is a potential for dozens of possible programming streams. We also believe that EPGs, or other cable system generated guides, will provide subscribers with relevant and up-to-date information in a more convenient manner than if we were to require operators to provide separate notifications. Nevertheless, we encourage operators to alert subscribers to the possibility that a broadcaster may offer several programming alternatives over the course of the day, where applicable.

C. Cable Antenna Relay Service

90. In the *Notice*, we recognized that cable operators are frequently dependent on cable television relay service ("CARS") microwave stations to relay broadcast television signals to and within their cable systems.[277] CARS stations distribute signals to microwave hubs where it may be physically impossible or too expensive to run actual cable wire. In many instances, a cable operator may not be able

[269]*See* 47 U.S.C. §573(c)(1)(B); 11 FCC Rcd at 18311-13.

[270]*DTV Must Carry Notice*, 13 FCC Rcd at 15119.

[271]Paxson Comments at 30.

[272]47 C.F.R. §76.964(a).

[273]*Id.*

[274]*DTV Must Carry Notice*, 13 FCC Rcd. at 15135.

[275]Pappas Comments at 37.

[276]ALTV Comments at 82-83.

[277]*See* 47 C.F.R. §§78.1-78.115.

to string cable through an area because of geographic impediments such as rivers, mountains or superhighways or due to other restrictions, such as the inability or the expense of laying underground cable. Under such circumstances, the cable operator may be able to use CARS band microwave for point-to-point and point-to-multi-point locations to intra-connect the cable system. For example, a cable system may run cable up to a CARS transmitter site, convert all the radio frequency (RF) channels to microwave frequencies for transmission, receive the microwave at a receive location, downconvert back to the RF channels, and complete delivery of the channels via physical wiring to the subscribers. We sought comment on whether the introduction of digital broadcast television affects the CARS system, and, if so, how. We did not receive any comments on CARS and the transition to digital television. We have no reason to expect that digital television service will interfere with CARS, and we decline to revise our Part 78 rules at this time. However, if issues arise as the transition progresses, we will revisit the matter.[278]

D. Program Exclusivity Rules

91. The program exclusivity regulations, as implemented in Sections 76.92 and 76.101 of the Commission's rules, protect exclusive distribution rights afforded to network and syndicated programming through private contractual arrangements.[279] Television broadcast station licensees with exclusive programming rights are entitled to protect such programming by exercising blackout rights against local cable systems importing the same programming from distant television broadcast stations. Licensees may assert their rights regardless of whether their signals are actually carried on the cable system in question.

92. Currently, television stations are entitled to exercise network and syndicated blackout rights within certain geographic areas.[280] In *Implementation of the Satellite Home Viewer Improvement Act of 1999: Application of Network Non-duplication, Syndicated Exclusivity and Sports Blackout Rules to Satellite Retransmission of Broadcast Signals,* Report and Order, the Commission recently applied to satellite carriers' retransmission of nationally distributed superstations the network non-duplication, syndicated exclusivity and sports blackout requirements that currently apply to cable operators.[281]

93. In general, a local television broadcast station may assert its exclusivity rights against cable systems located within 35 miles of the broadcaster's city of license. By exercising its rights, a local television broadcast station that has secured exclusive distribution rights to programming, can prohibit cable systems within 35 miles from importing that same programming from distant television stations. A cable operator, however, importing the same programming from an otherwise distant station, is not required to honor a blackout request from a local broadcaster if the distant station is "significantly viewed" in the cable community.[282] The concept of significant viewing is defined in Section 76.5(i) of

[278]The Commission is currently considering expanding eligibilty for CARS licenses to include all MVPDs. To the extent issues related to the digital transition are raised in that proceeding, they will be addressed in a forthcoming Report and Order. *See Petition for Rulemaking to Amend Eligibility Requirements in Part 78 Regarding 12 GHz Cable Television Relay Service*, 14 FCC Rcd. 11967 (1999).

[279]47 C.F.R. §§76.92, 76.101.

[280]47 C.F.R. §§76.92(a), 76.151.

[281]*SHVIA Non-duplication, Syndicated Exclusivty and Sports Blackout Order,* FCC No. 00-388 (rel. Nov. 2, 2000).

[282]47 C.F.R. §§76.92(f), 76.156(a).

the Commission's rules.[283] In addition to the Commission's network and syndicated exclusivity rules, significant viewing is also applicable to the Commission sports blackout rule,[284] and, through incorporation by reference, to the compulsory copyright licensing process.[285]

94. In the *Notice*, we sought comment on how the transition to digital television may affect these rules.[286] We specifically asked how digital broadcast multiplexing impacts these rules and whether the cable operator will be able to accommodate such black-out requests on various programming streams.[287] We also asked whether these rules were applicable in the digital age, with or without must carry, and whether it would be possible to repeal these rules and instead rely on the retransmission consent provisions of Section 325 of the Act to protect the rights in question.[288]

95. Commenters make a strong case for preserving the exclusivity rules during the transition to digital television. Indeed, there are no comments supporting repeal of the existing rules although NAB asserts that the question of repeal should be addressed in a separate docket.[289] ALTV believes that the Commission should apply the existing network and syndicated exclusivity rules to a local station's TV signals because the economic rationale behind the rules is the same for digital and analog.[290] NAB states that there is nothing inherent in the digital transition that should result in any changes to network nonduplication, syndicated exclusivity, or sports blackout; there are, in fact, stronger reasons to apply the rules in the digital context because the transition presents greater financial challenges to local stations.[291]

[283] A significantly viewed station is defined as one that is viewed "in other than cable television households as follows: (1) For a full or partial network station--a share of viewing hours of at least 3 percent (total week hours), and a net weekly circulation of at least 25 percent; and (2) for an independent station--a share of viewing hours of at least 2 percent (total week hours) and a net weekly circulation of at least 5 percent." 47 C.F.R. §76.5(i).

[284] 47 C.F.R. §76.67. The application of this rule to cause the deletion of certain sports events carried beyond the Grade B contour of the station broadcasting the event is through reference to Section 76.5(g) of the rules. 47 C.F.R. §76.5(g).

[285] 17 U.S.C. §111.

[286] *DTV Must Carry Notice*, 13 FCC Rcd. at 15135.

[287] *Id.*

[288] *Id.*

[289] NAB Comments at 50-51; a*ccord* ABA Comments at 9-11, Hildreth Comments at 11-12.

[290] ALTV Comments at 83. Pappas opposes changing the exclusivity rules for several reasons: (1) retransmission consent is not practically available to a large number of stations, including all but one of its own stations, because they do not have bargaining leverage; (2) relying on retransmission consent unravels Congress's intent to provide must carry as an alternative choice for carriage on a local cable system; (3) current program exclusivity rules give stations that are not carried on cable systems the right to enforce the rules, and thus prevent an operator from sidestepping a station's exclusivity rights; and (4) a cable operator could refuse to enter into a retransmission consent agreement, and if there were no exclusivity rules in place, the station would be without a remedy to enforce its exclusive programming arrangements against imported distant network signals. Pappas also states that the Commission should treat as significantly viewed in any area a digital signal whose companion analog station has been declared to be significantly viewed in that same area. Pappas Comments at 40-41.

[291] NAB Comments at 50.

NAB also states that the Commission should use a station's analog status to determine exclusivity issues for a station's digital signal, at least throughout the transition.[292]

96. MSTV states that it makes little sense for the Commission to allocate spectrum for all local stations and then fail to allow them to enforce contractual exclusivity rights, thereby undermining their competitiveness and financial viability.[293] Without exclusivity rules, MSTV posits, broadcasters would be at a competitive disadvantage vis-a-vis cable operators who can enforce exclusive contracts while broadcasters who have negotiated for exclusivity face duplicative programming from distant signals imported by the local cable system, thus diverting audience and advertising revenue.[294]

97. With regard to the effect of Section 325 on the need for exclusivity rules, MSTV stresses that a broadcaster's exclusivity rights cannot be protected through contractual relationships because: (1) Congress enacted retransmission consent intending that network nonduplication and syndicated exclusivity would apply and (2) relegating the exclusivity rules to contract terms would reinstate the competitive imbalance that the Commission sought to eliminate when it adopted the current rules.[295] MSTV asserts that local stations will not have sufficient negotiating power to insist on exclusivity where the cable system wants to carry a distant television signal from a large market because Section 76.64(m) prohibits local television stations from entering into exclusive retransmission consent agreements with a cable system.[296]

98. We find that there is an inadequate record in this proceeding upon which to base a change or repeal of the exclusivity rules. In addition, we note that the Act, as amended by the SHVIA, required the Commission to implement program exclusivity rules for satellite carriers that import certain defined superstations.[297] Therefore, we agree with numerous commenters that the topic of changing the rules be addressed at a future date, where a more complete and focused record can be developed. Until that time occurs, we will maintain our existing exclusivity framework for digital television signals. In addition, we shall make the appropriate change to Section 76.5 as suggested by MSTV. With respect to how SDTV multiplexing impacts the exclusivity rules and whether the cable operator will be able to accommodate blackout requests on various programming streams, we believe that it is not necessary to resolve this issue here.

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[292]*Id.* at 51.

[293]MSTV Comments at 21-22 and n. 59. MSTV states that if a local station cannot obtain exclusivity protection from cable operators, then the Champaign, IL cable system, for example, could import the Chicago television signal that duplicates the Champaign station's programming for which the Champaign station has negotiated exclusivity within the Champaign market. *Id.*

[294]*Id.*

[295]MSTV Comments at 24-25 and n. 67, 68.

[296]*Id.* ABA and Hildreth also assert that repealing the Commission's exclusivity rules, and instead relying on retransmission consent, is based on the faulty premise that most or all stations will elect retransmission consent. The repeal of the exclusivity rules is an imperfect idea because even stations that are not carried on a cable system can demand exclusivity on that system under current rules. Repeal of the rules might also lead to more carriage of "distant" television stations and less of local. ABA Comments at 9-11; Hildreth Comments at 11-12.

[297]47 U.S.C. §339(b)

99. As we stated in the *SHVIA Non-Duplication, Syndicated Exclusivity and Sports Blackout Order,* only those exclusive contracts that provide for exclusivity vis a vis signals delivered by satellite carriers or are broad enough to encompass the delivery of duplicating programming by any delivery means entitle a station to assert exclusivity rights under the rules.[298] Likewise, in the digital context, only those exclusive contracts that specifically cover digital signals entitle a station to assert exclusivity rights. We note also that, in the *SHVIA Non-Duplication, Syndicated Exclusivity and Sports Blackout Order*, we stated that we were disinclined, in the early stage of the DTV transition, to allow a broadcaster to use an exclusive contract for digital programming only to prevent a cable system or satellite carrier from providing that programming in analog form to its subscribers.[299] Therefore, neither satellite carriers nor cable operators are permitted to carry the digital version of a program when the contract expressly provides exclusivity for both, any or all formats.

100. **Significantly Viewed.** In the *Notice*, we stated that the significant viewing standard supplements other "local" station definitions by permitting stations that would otherwise be considered "distant," for program exclusivity purposes, to be considered local based on viewing surveys directly demonstrating that over-the-air viewers have access to the signals in question.[300] Because digital broadcast television stations will not, in the early stages of their deployment, have a significant over-the-air audience, we sought comment on methods to address the kinds of issues that the significant viewing standard addresses in the analog environment.[301] We asked, for example, whether a new method should be developed that measures viewing in places that are equipped with digital receivers.[302] In the alternative, we asked whether the "significant viewing" status of analog stations should be transferred to their digital counterparts.[303] With respect to these rules, we note that in adopting technical rules for the digital transmission of broadcast signals, the Commission attempted to insure that a station's digital over-the-air coverage area would replicate as closely as possible its current over-the-air analog coverage area. In view of this, and consistent with the comments received on this subject, we believe that the public interest is best served by according the digital signal of a television broadcast station the same significantly viewed status accorded the analog signal. We note, however, that DTV-only television stations must petition the Commission for significantly viewed status under the same requirements for analog stations in Section 76.54 of the Commission's rules.

E. Tiers and Rates

101. **Tier Placement.** Sections 614 and 615 are silent on the question of where signals subject to mandatory carriage must be placed, but Section 623(b)(7), one of the Act's rate regulation provisions, requires that "all signals carried in fulfillment of the requirements of section 614 and 615" must be provided to subscribers on a "separately available basic service tier to which subscription is required for access to any other tier of service."[304] In the *Notice*, we sought comment on whether a cable operator must

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[298]*SHVIA Non-duplication, Syndicated Exclusivity, and Sports Blackout Order* at para. 36.

[299]*Id.* at para. 76.

[300]*DTV Must Carry Notice*, 13 FCC Rcd. at 15136.

[301]*Id.*

[302]*Id.*

[303]*Id.*

[304]47 U.S.C. §543(b)(7)(A). *See also* 47 U.S.C. §534(b)(7); §535(h); § 543(c).

place a broadcaster's digital signal on the same basic tier where the analog signals are found or whether a separate digital basic service tier could be established that would be available only to subscribers capable of viewing digital broadcast signals.[305] Adelphia argues that cable operators should be allowed to create a separate digital tier that could be purchased as an accompaniment to the analog basic tier for an extra fee.[306] ALTV, on the other hand, submits that the Act applies to local television stations' DTV signals just as it applies to analog signals; that is, DTV signals must be placed on the cable system's basic service tier and made available to every subscriber.[307]

102. In the context of analog must carry, it has been the Commission's view that the Act contemplates there be one basic service tier.[308] We believe that in the context of the new digital carriage requirements, it is consistent with the statutory language to require that a broadcaster's digital signal must be available on a basic tier such that all broadcast signals are available to all cable subscribers at the lowest priced tier of service, as Congress envisioned. The basic service tier, including any broadcast signals carried, will continue to be under the jurisdiction of the local franchising authority, and as such, will be rate regulated if the local franchising authority has been certified under Section 623 of the Act.[309] We note, however, that if a cable system faces effective competition under one of the four statutory tests,[310] and is deregulated pursuant to a Commission order, the cable operator is free to place a broadcaster's digital signal on upper tiers of service or on a separate digital service tier. This finding is based upon the belief that Section 623(b)(7) is one of those rate regulation requirements that sunsets once competition is present in a given franchise area. We believe that the decision in *Time Warner v. FCC* supports this interpretation.[311]

103. **Rates.** As noted above, digital broadcast signal carriage also has potential consequences for the cable television rate regulation process. In communities where there has not been a finding of effective competition or where there is no local rate enforcement, rates for the basic service tier ("BST") are subject to regulation by local franchise authorities.[312] Regulated cable systems have established initial

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[305]*Digital Must Carry Notice* at 15126-27.

[306]Adelphia *et. al.* Comments at 32.

[307]ALTV Comments at 71; *accord* Golden Orange Comments at 8, Morgan Murphy Comments at 15, and UPN Affiliates Comments at 5.

[308]In its *First Rate Report and Order*, the Commission, citing provisions in the 1992 Cable Act that consistently refer to "basic tier" in the singular, concluded that the Act contemplates that each cable operator must offer only one basic tier. *See Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation*, Report and Order and Further Notice of Proposed Rulemaking, 8 FCC Rcd. 5631, 5744 (1993) ("*First Rate Report and Order").* The U.S. Court of Appeals for the District of Columbia Circuit found that the Commission's single basic tier requirement constituted a permissible interpretation of the 1992 Cable Act. *See Time Warner v. FCC*, 56 F.3d 151, 199 (D.C. Cir. 1995).

[309]*See* 47 U.S.C. §543(a)(3).

[310]*See* 47 U.S.C. §543(l)(1).

[311]*Time Warner*, 56 F.3d at 192 (holding that other provisions of Section 623, such as the Act's tier buy-through requirements, apply only in the absence of effective competition).

[312]47 U.S.C. §543(b)(7)(B); s*ee also* 47 C.F.R. §76.901 *et seq.* The rates of cable programming service tiers ("CPST") were subject to Commission regulation on a complaint basis, but these regulations sunsetted on March 31, 1999. *See* 47 U.S.C. §543(c)(4).

regulated rates using either the "benchmark" or "cost of service" methodologies pursuant to the Commission's rules.[313] Once initial rates are established, cable operators are permitted to adjust rates for changes in external costs and inflation. Regulated cable operators seeking to adjust their BST rates to reflect these changes must justify rate increases using the applicable forms.[314] There are also cost pass-through mechanisms for defined categories of "external" costs, including franchise fees and certain local franchise costs, as well as fees paid for programming, retransmission consent, and copyright.[315] Compliance costs associated with must carry are not covered by the definition of external costs.[316]

104. The Commission is charged with adopting a rate regulation scheme appropriate for the BST.[317] The present rate rules take into account, *inter alia*, "the direct costs (if any) of obtaining, transmitting, and otherwise providing signals carried on the basic service tier . . . and changes in such costs."[318] In the *Notice*, we sought comment on what, if any, changes in the Commission's rate rules may be necessary or desirable.[319] We also asked parties to refresh the record on the specific technical modifications needed to enable cable systems to deliver digital broadcast television to subscribers.[320] Relatively few parties addressed the rate regulation issues we raised or provided data on the anticipated costs of providing digital broadcast programming to subscribers. Therefore, it is difficult to specify how costs attributable to providing digital programming, if any, might be reflected in cable rates. Armstrong, a mid-size cable operator, states that the costs for digital conversion will include upgrading tower capacity, building or leasing additional tower space, and adding new digital antennas.[321] SCBA estimates the cost for digital broadcast signal carriage will be at least $2,000 per digital channel at the headend, which would amount to $10,000 or more for the average television market with five local stations.[322] In contrast, ALTV contends there is only a marginal cost to add a few additional DTV signals.[323] As to the issue of whether the carriage costs could be passed along to subscribers, ALTV cautions that the

[313]*See* 47 C.F.R. §76.922(a). Initial rates recover the costs of the cable network and are adjusted for inflation. A "cost of service" mechanism is also available to cable system operators that believe the benchmark process fails to adequately account for system costs. *See* 47 C.F.R. §76.922(i).

[314]FCC Form 1210, Updating Maximum Permitted Rates for Regulated Cable Service (May 1994), FCC Form 1240, Annual Updating for Maximum Permitted Rates For Regulated Cable Service (July 1996); s*ee also* 47 C.F.R. §§76.922(d), (e), 47 C.F.R. §76.933, and FCC Form 1235, Abbreviated Cost of Service Filing for Cable Network Upgrades.

[315]47 C.F.R. §§76.922(c)(3), (f).

[316]*See* 47 C.F.R. §76.922(f).

[317]*See* 47 U.S.C. §543(b)(1).

[318]47 U.S.C. §543(b)(2)(C)(ii).

[319]*DTV Must Carry Notice*, 13 FCC Rcd. at 15134-35.

[320]*Id.* at 15134-35.

[321]Armstrong notes that digital towers require a 1:1 ratio for channels to antennas, so that five digital signals carried would require five more additional antennas. Armstrong states that it has no room on some of its towers and will need new $100,000 stand-alone towers in certain circumstances. Armstrong Comments at 40.

[322]SCBA Comments at 6. SCBA adds that if each of the five stations chose to broadcast three digital signals and the cable system had to carry all of them, the cost could increase to $30,000 at the headend. *Id.*

[323]ALTV Comments at 82 and n. 191.

Commission should not allow the cable industry to exploit fears of rate increases due to digital carriage.[324] AAPTS asserts that even without must carry requirements, cable operators will be buying equipment to carry digital signals, so there is no basis to impose these costs on smaller broadcasters, especially noncommercial educational television stations.[325]

105. With regard to the rate issues, we first note that there are costs for carrying digital television signals at different stages of the cable system transmission process. First, antennas and/or other equipment necessary to receive the broadcast signal at the cable headend are required. In the must carry context, these costs are the broadcasters' responsibility under the Act.[326] In the retransmission consent context, the broadcaster and the cable operator may agree to any cost arrangement that is mutually agreeable. Then there are costs for processing the digital television signal in the cable headend and at other points in the cable system up to the point in which the cable is installed inside the cable subscribers' premises. The treatment of these kinds of costs is considered below. Finally, there are costs associated with providing subscribers with customer premises equipment, such as set top boxes. As explained below, we find no need to change the rules relating to such equipment. We also note that we are considering adopting a per channel adjustment methodology for those operators that add digital broadcast signals to their channel line-ups. This topic is discussed in the *FNPRM*.

106. In general, rate adjustments for channels added to the BST are limited to the recovery of external costs, including a 7.5% mark-up for new programming costs. "External costs" have been specifically limited to taxes, franchise fees, franchise compliance costs (including PEG), retransmission and copyright fees, other programming costs, and Commission regulatory fees.[327] There are also rules and forms in place that address situations where cable systems are upgrading physical plant to provide digital programming to cable subscribers. Section 76.922(j)(1) of the Commission's rules states: "Cable operators that undertake significant network upgrades requiring added capital investment may justify an increase in rates for regulated services by demonstrating that the capital investment will benefit subscribers."[328] FCC Form 1235 is an abbreviated cost of service filing used for network upgrades pursuant to Section 76.922(j). This form permits operators to adjust rates by reporting the cost of a system upgrade, which is added to a system's tier rate to generate a maximum permitted rate.[329] The benchmark rates and price cap adjustments for inflation will generally allow systems to recover normal capital costs, but cable operators may use Form 1235 to recover costs for "significant" upgrades, such as expansion of bandwidth, conversion to fiber optics, or system rebuilds, without doing a cost of service analysis for the whole system.[330] The original goals of the abbreviated cost-of-service showing for

[324] *Id.*

[325] AAPTS Comments at 52.

[326] 47 U.S.C. §534(b)(10)(A).

[327] *See* 47 C.F.R. §76.922(f).

[328] 47 C.F.R. §76.922(j)(1).

[329] *See Rate Regulation and Adoption of Uniform Accounting System for Provision of Regulated Cable Service*, Second Report and Order, First Order on Reconsideration, and Further Notice of Proposed Rulemaking, 11 FCC Rcd. 2220, 2295 (1996) ("Final Cost Order"); *see also Marcus Cable Associates, L.P.:City of Glendale*. Memorandum Opinion and Order, 12 FCC Rcd. 23216 (1997) ("Marcus") (upgrade form allows cable operators to justify rate increases related to significant capital expenditures to improve rate-regulated services).

network upgrades, to "promote the availability of diverse cable services and facilities [and] encourage economically justified upgrades," are as relevant now as they were in 1994.[331]

107. For an operator to justify rate adjustments using the FCC Form 1235, the Commission currently requires: (1) that the upgrade be 'significant' and require added capital investment, such as expansion of bandwidth capacity, conversion to fiber optics or system rebuilds; (2) that the upgrade actually benefit subscribers through improvements in the regulated services subject to the rate increase; (3) that the upgrade rate increase not be assessed until the upgrade is complete and providing benefits to subscribers of regulated services; (4) that the operator demonstrate its net increase in costs, taking into account current depreciation expense, projected changes in maintenance and other expenses, and changes in other revenues; and (5) that the operator allocate its costs to ensure that only costs allocable to subscribers of regulated services are imposed upon them.[332] Based on the lack of comment about the need for rate adjustments, we expect that many cable systems will be able to accommodate digital television signals through the normal improvements and expansions of service that are reflected in the rate adjustments allowed by FCC Forms 1210 and 1240. However, some systems are also undertaking significant overall system upgrades, a part of which will include a digital buildout, and for which a Form 1235 upgrade rate adjustment would be appropriate.

108. There may also be systems, requiring significant technical improvements to carry digital signals, that do not necessarily qualify as an "upgrade" under FCC Form 1235. For these kinds of systems as well, we believe it will be appropriate for operators to use FCC Form 1235 for a rate adjustment. Allowing operators to pursue this option may hasten the digital transition as it will provide an incentive to add headend and other system equipment to accommodate the carriage of digital television signals.

109. The current instructions for Form 1235 require the cable operator to qualify for an upgrade rate adjustment by (1) certifying that the upgrade meets the Minimum Technical Specifications[333] or (2) describing how the upgrade will be significant and will benefit subscribers. The instructions for the second option include, where applicable, the number of channels added to a tier and the level of improvement in picture quality.[334] Thus, we find that Form 1235 can be an appropriate vehicle for allowing a cable operator to adjust rates commensurate with their upgrade costs to the extent such upgrades are necessary to provide digital broadcast programming to its subscribers. We note, however, that an operator may file a Form 1235, even if it had done so before, if it can demonstrate new costs are

(…continued from previous page)
[330]*See Rate Regulation and Adoption of Uniform Accounting System for Provision of Regulated Cable Service*, Report and Order and Further Notice of Proposed Rulemaking, 9 FCC Rcd. 4527, 4675 (1994) ("*Interim Cost Order*").

[331]*Id.* at 4674.

[332]*Id.*; *see also Marcus*, 12 FCC Rcd. at 4.

[333]The Minimum Technical Specifications are (1) an increase in usable bandwidth to at least 550 MHz capacity with upgrade capability to 750 MHz, fiber to the node or beyond, and no more than 1,500 homes per node; or (2) for "small systems," an increase in usable bandwidth to at least 550 MHz, fiber to the node or beyond, and no more than 3,000 homes per node. *See* FCC Form 1235, p. 5.

[334]*Id.*

not being recovered through the surcharge calculation on a previous Form 1235. Section 76.922(j) is amended to clarify that it is appropriate to use the network upgrade form in these circumstances.[335]

110. While these upgrades will make digital broadcast programming available to all basic cable television subscribers, we believe the rate adjustments should only apply to those that purchase digital programming. We note that rate increases based on upgrades shall not be assessed on these subscribers until the upgrade is complete and the subscriber is receiving digital television signals.[336] If the digital broadcast programming were offered on the BST, the basic tier rate would consist of the maximum permitted rate for the basic tier plus the FCC Form 1235 surcharge which represents the portion of the digital upgrade cost allocated to the basic tier. An operator could continue to allocate all of its digital upgrade costs to the CPST.

111. Finally, we note that regulated cable systems may charge subscribers for customer premises equipment, such as the set-top box, that may likely be necessary for digital subscribers.[337] In communities where there has not been a finding of effective competition, these equipment rates are subject to regulation. Our rules permit cable operators to charge subscribers for set top boxes and other equipment provided the charges do not exceed actual costs.[338] In addition, the Act provides that cable operators can aggregate their equipment costs on a franchise, system, regional, or company level and can aggregate the costs into broad categories, regardless of the varying levels of functionality of the equipment within these broad categories.[339] As we find that the regulatory framework in place for cable subscriber premises equipment is adequate to account for the costs of adding digital television signals, there is no need to make rule adjustments here.

VII. FURTHER NOTICE OF PROPOSED RULEMAKING

112. As noted above, after reviewing the comments submitted in this proceeding, we arrive at the tentative conclusion that, based on the current record, a dual carriage requirement may burden cable operators' First Amendment interests more than is necessary to further the important governmental interests they would promote. However, we seek to gather substantial evidence on this matter so that we may evaluate the issues on a complete and full record. Accordingly, we request further information on a number of matters, including, but not limited to: (1) the need for dual carriage for a successful transition to digital television and return of the analog spectrum; (2) cable system channel capacity; and (3) digital retransmission consent. Much has changed since we first opened this docket in July of 1998, and it is necessary to update the record to reflect events pertinent to the carriage issues being debated. In addition,

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[335]*See* amended rule in Appendix D (cable operators that undertake significant network upgrades requiring added capital investment may justify an increase in rates for regulated services by demonstrating that the capital investment will benefit subscribers, including providing television broadcast programming in a digital format).

[336]*See* 47 C.F.R. §76.922(j)(2). The process whereby operators can file for pre-approval based on projected costs at any time before the upgrade services become available is unchanged. The pre-approval upgrade incentive add-on may be charged to subscribers as subsections of the system are completed and the upgraded service is provided to subscribers. Operators using this option must refile the Form 1235 when the upgrade is complete, using actual costs where applicable. *See* FCC Form 1235, Instructions for Completion of Abbreviated Cost of Service Filing for Cable Network Services at 2 (Feb. 1996).

[337]*See* 47 U.S.C. §543(b)(3)(A), 47 C.F.R. §76.923.

[338]*See* 47 C.F.R. §76.923(a)(2).

[339]47 U.S.C. §543(a)(7).

we ask whether cable operators should be allowed to increase subscriber rates for each 6 MHz of capacity devoted to the carriage of digital broadcast signals.

113. To date in this proceeding, we have received comments arguing that the statute requires dual carriage or that the statute forbids it. It is our view, having deliberated extensively on this question, that neither of these views prevail. Based on the record currently before us, we believe that the statute neither compels dual carriage; nor prohibits it. It is precisely the ambiguity of the statute that has driven this policy debate. In order to weigh the constitutional questions inherent in a statutory construction that would permit dual carriage, we believe it is appropriate and necessary to more fully develop the record in this regard. Because any decision requiring dual carriage would likely be subject to a constitutional challenge, and because an administrative agency can consider potential constitutional infirmities in deciding between possible interpretations of a statute, we are compelled to further develop the record on the impact dual carriage would have on broadcast stations, cable operators and cable programmers, as well as consumers. We believe that more evidence is necessary because the Supreme Court sustained the Act's analog broadcast signal carriage requirements against a First Amendment challenge principally because Congress and the broadcasting industry built a substantial record of the harm to television stations in the absence of mandatory analog carriage rules.[340] We are also mindful that the record must substantially reflect how Commission action in this proceeding will serve the three identified governmental interests supporting mandatory carriage in *Turner*, which are: (1) the preservation of the benefits of free over-the-air television; (2) the promotion of the widespread dissemination of information from a multiplicity of sources; and (3) the promotion of fair competition.[341]

114. We also recognize that the intermediate scrutiny factors established in *U.S. v. O'Brien*[342] and applied in the *Turner* cases, for determining whether a content-neutral rule or regulation violates the Constitution, must also be satisfied here. A content-neutral regulation will be upheld if: (1) it furthers an important or substantial government interest; (2) the government interest is unrelated to the suppression of free expression; and (3) the incidental restriction on alleged First Amendment freedoms is no greater than is essential to the furtherance of that interest.[343] In sum, under the *O'Brien* test, a regulation must not burden substantially more speech than is necessary to further the government's legitimate interests. Thus, a dual carriage rule must satisfy the *Turner* factors and meet the *O'Brien* test. We invite commenters that support a dual carriage requirement to provide specific empirical information to demonstrate how mandatory dual carriage would satisfy the requirements of both *Turner* and *O'Brien.* We request that commenters that have previously submitted legal arguments on these points in response to the *Notice*, not repeat these arguments.

115. In the case of dual carriage, we believe that the record is insufficient to demonstrate the degree of harm broadcasters will suffer without the carriage of both signals. In addition, we must carefully consider the burden such a requirement would impose on the cable operator. We seek information on digital retransmission consent agreements to determine the degree to which cable operators are carrying digital signals on a voluntary basis. If broadcasters are being carried by agreement, then they may not be harmed in the absence of a digital carriage requirement. In addition, First Amendment precedent requires that we tailor the carriage requirement to avoid burdening more speech

[340] *Turner Broadcasting System, Inc. v. U.S.*, 117 S. Ct. 1174, 1189, 520 US 180 (1997) ("*Turner II*").

[341] *Turner Broadcasting System, Inc. v. U.S.*, 512 U.S. 622, 662 (1994) ("*Turner I*"); *Turner II*, 117 S.Ct. at 1186.

[342] 391 U.S. 367, 377 (1968).

[343] *Id.*

than necessary. In this regard, the impact of mandatory carriage on cable systems was relevant in *Turner*. We therefore seek substantive information to determine cable system channel capacity.

116. Concurrently with this *FNPRM*, we are sending out a survey to cable operators that asks specific questions concerning retransmission consent as well as cable system channel capacity.[344] We believe that this form of inquiry is necessary because we need particularized system information that can only be obtained through a survey. The answers to this survey will be used to supplement the general responses we receive as a result of the questions we ask in the *FNPRM*. The cable operators' answers to the survey questions will be included in the record and available for public comment. We expect that the information provided by the cable operators will provide further insight regarding the constitutional questions inherent in the dual carriage discussion.

A. Digital Television Transition and Mandatory Carriage

117. Both Congress and the Commission have worked to develop a digital television transition that accounts for the needs of the broadcast industry, while recognizing the government's interest in the prompt return of the analog broadcast spectrum. The Commission's stated expectation when the DTV rules were adopted was that analog television broadcasting would cease no later than the end of 2006. With passage of the *Balanced Budget Act of 1997*, Congress codified the December 31, 2006 analog television termination date, but also adopted certain exceptions to it.[345] The *Notice* in this proceeding

[344]We note that the National Association of Telecommunications Officers and Advisors ("NATOA") commented that the Commission should carefully study channel capacity and retransmission consent issues before acting on the issue of dual carriage. NATOA Reply Comments at 3-4.

[345]Section 309(j)(14)of the Communications Act now provides:

(A) Limitations on terms of terrestrial television broadcast licenses. - A television broadcast license that authorizes analog television service may not be renewed to authorize such service for a period that extends beyond December 31, 2006.

(B) Extension. - The Commission shall extend the date described in subparagraph (A) for any station that requests such extension in any television market if the Commission finds that--

(i) one or more of the stations in such market that are licensed to or affiliated with one of the four largest national television networks are not broadcasting a digital television service signal, and the Commission finds that each such station has exercised due diligence and satisfies the conditions for an extension of the Commission's applicable construction deadlines for digital television service in that market;

(ii) digital-to-analog converter technology is not generally available in such market; or

(iii) in any market in which an extension is not available under clause (i) or (ii), 15 percent or more of the television households in such market--

(I) do not subscribe to a multichannel video programming distributor (as defined in section 522 of this title) that carries one of the digital television service programming channels of each of the television stations broadcasting such a channel in such market; and

(II) do not have either--

(a) at least one television receiver capable of receiving the digital television service signals of the television stations licensed in such market; or

(continued….)

discussed must carry rules for possible application during a temporary transitional period prior to the cessation of analog broadcasting. Because of the nature of the exceptions set forth in the *Balanced Budget Act of 1997*, questions have arisen as to how long the transition period might last either with or without a dual carriage requirement. Some have expressed doubt that the return of the analog broadcast spectrum will be completed by the end of 2006, regardless of whether there is a digital carriage requirement.[346] Others have argued that dual carriage is necessary to enable broadcasters to meet the statutory tests and complete the transition on time.[347] None of the participants in this proceeding, however, have provided a concise plan for how and when the transition will be completed. As such, a number of questions concerning the transition have arisen. For example, under what circumstances and statutory interpretations will the statutory criteria for the auction of recaptured broadcast television spectrum be satisfied? Will the analog television license be returned when 85% or more of the television households in a market *either* subscribe to an MVPD that carries all of the digital broadcast stations in the market *or* have a DTV receiver or digital downconverter to receive the digital signal over the air? Or is there a different interpretation of the statutory exceptions? Will the spectrum be returned if some of the MVPD subscribers are unable to receive and view the DTV programming notwithstanding that it is carried by the MVPD because they do not have a digital receiver or converter? How does the growth of competitive non-cable MVPD's change the analysis? Alternatively, would the analog licenses be returned in a market in which 85% of the television households had a DTV receiver or digital-to-analog converter, but only 30% subscribed to a MVPD that carried all of the digital television stations in the market?

118. Understanding how the affected parties expect to complete the transition, and exactly how the law applies, substantially affects the Commission's policy approach to the digital television transition as well as to the overall issue of cable carriage. A mandatory dual carriage requirement, for example, would place a more significant and lasting burden on a cable operator's constitutional rights if in fact there will be a substantially extended transition to a digital-only environment. We seek comment on these transition issues and ask for more specific comment on when the analog spectrum is likely to be returned under both mandatory and non- mandatory dual carriage scenarios. We also seek comment on whether and how the dual carriage burden on cable operators may be lessened by using a transitional approach limiting dual carriage to a specified period of time. For example, in this regard, how would a three year limit on dual carriage affect the constitutional question?

119. There are several other issues concerning the rollout of digital broadcast television that still remain. For example, a number of digital television licensees in markets 11-30, that were required to begin digital broadcasting on November 1, 1999 have asked for extensions of time to build out their facilities.[348] Such petitions assert that these extensions may have been necessary because local zoning requirements have hindered the construction of digital broadcast towers or because there are construction and equipment delays. Whatever the case may be, it is difficult to proceed with the dual carriage question

(…continued from previous page)

(b) at least one television receiver of analog television service signals equipped with digital-to-analog converter technology capable of receiving the digital television service signals of the television stations licensed in such market.

[346] *Ex Parte* meeting between NAB and Commission Staff, October 26, 1999; s*ee also*, Peter J. Brown, 2006: A DTV Odyssey—Broadcasters, Manufacturers Agree Spectrum Giveback in Six Years Highly Unlikely, *Digital Television*, December, 1999 at 1, 6.

[347] ALTV Comments at 23-34.

[348] DTV Application Processing Status—November 15, 2000, http://www.fcc.gov/mmb/vsd/dtvstatus.html.

if it remains unclear how and when digital signals will become available in any particular market. Because an operator is only required to carry broadcast signals up to one-third of its channel capacity, to rule on the dual carriage issue now may result in on-air digital signals being carried, at the expense of those yet-to-air digital signals that may not be carried because the operator's one-third cap has been met and the operator is reluctant to disrupt viewers by changing signals carried. In this regard, we ask whether we should wait for all or a more significant number of broadcasters to build out their facilities before considering a dual carriage rule to avoid this potential disruption.

120. We also note that there appears to be a limited amount of original digital programming being broadcast. This calls into question the practicality of imposing a dual carriage rule at this time. Cable subscribers would not immediately benefit from a dual carriage rule if there is little to view but duplicative material. In addition, there is a risk that if carriage were mandated, cable subscribers would lose existing cable programming services that would be replaced on the channel line-up by digital television signals with less programming. It is difficult to decide definitional issues, such as what would be considered a "duplicative signal" without more information.[349] We ask broadcasters to describe what part of their planned digital programming streams will be devoted to simulcast of their analog programming and what parts are, or will be used, for other programming.[350] We ask broadcasters to provide us with information on the exact amount of digital programming, on a weekly basis, being aired in a high definition format and the exact amount of original digital programming. We also seek comment on the number of hours, in an average day, that a broadcaster currently airs digital television, and specifically high definition digital programming.

121. We also seek further comment on issues relevant to the carriage of digital signals by small operators. As described in the Order, above, the SCBA expressed concern that allowing broadcasters to tie analog and digital retransmission consent could have a negative financial effect on small cable operators.[351] The current record does not contain adequate evidence on this point. We specifically request information on small cable operators' equipment costs to deliver digital signals to subscribers and experiences thus far with retransmission consent negotiations involving both analog and digital signals.

122. **Program-related.** In addition, as discussed above, cable operators are required to carry "program-related" material as part of the broadcaster's primary video.[352] We seek comment on the proper scope of program-related in the digital context. As we note in the Order above, we believe that digital television offers the ability to enhance video programming in a number of ways. For example, a digital television broadcast of a sporting event could include multiple camera angles from which the viewer may select. In addition, a digital broadcast could enable viewers to select other embedded information such as sports statistics to complement a sports broadcast or detailed financial information to complement a financial news broadcast. We seek comment on whether such information or interactive enhancements like playing along with a game or chatting during a TV program should qualify as "program related." What are broadcasters' plans in this regard? What are the technical requirements for broadcasting, receiving and viewing this programming material? Would they be viewed on a screen simultaneously or

[349]47 U.S.C. §534(b)(5), *see also DTV Must Carry Notice*, 13 FCC Rcd. at 15123.

[350]*See DTV Fifth Report and Order*, 12 FCC Rcd. at 12832 (requiring broadcasters to begin phasing in simulcasting in 2003 (50%) and complete 100% simulcasting in 2006).

[351]*See* discussion at ¶ 34, *supra.*

[352] *See, supra,* ¶ 57.

is it necessary to change channels or select a different view on the same screen? What is the proper relationship between "program-related" and "ancillary or supplementary" in terms of the statutory objectives? To what extent, if any, is "program-related" limited by ancillary or supplementary? We also note that the statutory language that describes "program-related" in the context of NCE stations differs in some respects from the language regarding program-related content for commercial stations.[353] Specifically, Section 615(g)(1), establishing the content of NCE stations to be carried by cable operators, tracks the language of Section 614(b)(3)(A), the provision for commercial broadcasters, except that the NCE provision goes on to include in the definition of "program related" material: "that may be necessary for receipt of programming by handicapped persons or for educational or language purposes."[354] In light of the foregoing, we seek comment on how to define "program related" material for NCE stations. How, if at all, should it differ from "program-related" in the context of commercial stations? For example, some commenters have argued that if an NCE station multicasts programming for "educational" purposes the cable operator should carry all such program streams.[355] We seek comment on whether these "educational" program streams should qualify as "program related" in the context of must carry, particularly in light of the language in 615(g)(1) noted above.

B. Channel Capacity

123. In the *Notice*, we sought quantified estimates and forecasts of available usable channel capacity.[356] We asked whether there were differences in channel capacity that are based on franchise requirements, patterns of ownership, geographic location, or other factors.[357] We also inquired about the average number of channels dedicated to various categories of programming, such as pay-per-view, leased access, local and non-local broadcast channels, and others that would assist us in understanding the degree to which capacity is, and will be, available over the next several years.[358] We sought system upgrade information.[359] For example, we asked for comment on whether 750 MHz is the proper cutoff for defining an upgraded system or should a lower number, such as 450 MHz, be used instead.[360] We also asked commenters to provide information on the expected growth rate for cable channel capacity between now and 2003.[361] In addition, we sought comment about cable programmer plans to convert to digital and what additional carriage needs these programmers would have in the future.[362] These questions were posed to generate a record on available channel capacity for digital carriage purposes and help the Commission determine the speech burden on cable operators under the First Amendment and the *Turne*r cases.

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[353] Compare Section 614(b)(3)(A) and 615(g)(1).

[354] 47 U.S.C. § 535(g)(1).

[355] *See e.g., Letter from the Association of America's Public Television Stations*, January 18, 2001.

[356] *DTV Must Carry Notice*, 13 FCC Rcd. at 15121.

[357] *Id.*

[358] *Id.*

[359] *Id.* at 15115.

[360] *Id.*

[361] *Id.*

[362] *Id.*

124. We received widely divergent information concerning cable channel capacity availability. For example, NAB asserts that current channel capacity is substantial and a significant number of channels are unutilized, particularly in large markets where the Commission has required the construction of the first DTV stations.[363] NCTA disputes this claim and asserts that what matters is not whether a cable system has adequate capacity to add new digital must carry signals during the transition, but whether a significant number of actual systems serving a significant number of customers will be forced to remove services to accommodate both analog and digital must carry signals.[364] We find the comments and analyses provided by the commenters are useful for establishing the framework for this inquiry. However, a number of the commenters rely on data sources that are either incomplete, or draw upon an unrepresentative sample of cable systems.[365] Moreover, some of the data is outdated, for future channel capacity estimates. For all of these reasons, as well as the fact that accurate capacity information is essential for a well articulated and constitutionally sustainable dual carriage decision under *O'Brien* and *Turner*, we seek further information on current capacity and forecasts for capacity growth in the future.

125. We first reiterate the questions we posed in the *Notice*, as summarized in paragraph 121, above. We then note that the NCTA, on its website, has stated the following: "It is estimated that 82% of all cable homes now are passed by at least 550 MHz plant—with 65% of cable homes passed by systems with 750 MHz or higher, positioning cable to compete more effectively with DBS companies, who typically offer more than 100 channels."[366] While this information is more recent than the data submitted by the NAB, it is still tabulated from reports in 1999. Thus, we ask for any information on system upgrades current through this month. We specifically seek comment on the number of cable systems nationwide, on a percentage basis, that are now, or soon will be, upgraded to 750 MHz. With regard to these kinds of systems, we ask how many channels are now, or soon will be available for video programming. We seek comment on whether it is possible for 750 MHz systems to be channel-locked and have no capacity to carry additional digital broadcast signals. We seek comment on cable industry plans to build systems of greater capacity in the future.

126. We also seek comment on techniques that conserve or recapture cable channel capacity. Data on this matter is important because it may belie the cable industry's claim that there is, or will be, no channel capacity to add more programming. For example, an operator that uses 256 QAM will have 40% more capacity than an operator that does not. With this noted, we ask how many cable systems are now, or soon will be, using 256 QAM. In addition, we ask if there are certain set top boxes or related software that can further increase capacity for systems using 256 QAM. Some operators are also using specialized techniques that can comb packages of digital cable programming sent by digital compression operations such as Headend in the Sky ("HITS") or other digital compression program delivery services.[367] Using such filtering technology, an operator can select the digital cable programming it wants to carry and

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[363]NAB Comments at 27.

[364]*Id.* at 53.

[365]*See* Time Warner Comments at Exhibit E (listing a select few cable system clusters to exemplify the burden a dual carriage requirement would impose).

[366]*See* http://www.ncta.com/glance.html (*citing* Paul Kagan Associates, Inc., Cable TV Technology, May 28, 1999, p.3).

[367]Digital programming packages sent via satellite come in clusters of services known as "pods." A pod may consist of 3-8 thematically similar programming services, such as sports or movies. Until recently, cable operators had to receive the entire pod and could not parse out individual services.

discard that programming it prefers not to carry.[368] Through this process, an operator can save as much as 10 MHz of cable channel capacity.[369] We seek comment on how many operators are currently using combing technology to recapture spectrum. A third technique used by some cable operators to save channel capacity is to shift certain services from an analog tier to a digital tier where such programming will be digitally compressed. By doing this, an operator could free up additional analog space for other uses. We seek comment on this technique and ask how many operators are now exercising this option.

127. In its comments, New World Paradigm ("NWP") states that the Commission should adopt digital carriage rules that allow or motivate cable operators to deliver services from video servers through the internet's channel addressing methodology. According to NWP, channel addressing uses existing capacity very efficiently and asserts that adoption of the internet's channel addressing method would serve the public interest because it expands cable channel capacity to accommodate an infinite amount of services.[370] NWP believes that accessing programming residing in a video server, and then sending that specific programming to the subscriber, is a far more efficient way of using channel capacity than shipping all channels to the subscriber at the same time.[371] NWP states that a channel should be defined as "any internet addressable video service engineered for the electromagnetic spectrum carried solely in wired networks from the producer of the video service and delivered through a video server and made available for and to subscribers of a cable system."[372] NWP argues that expanding the definition of "cable channel" would position cable to be a communications medium merging voice, internet and video services into a characterless digital data stream.[373] We seek comment on NWP's proposal, in general, and ask whether it is technically feasible for cable operators to cache broadcast programming in this manner. We also ask what statutory or rule changes would be necessary to accomplish what NWP proposes. Finally, we ask what copyright issues may arise in this context, how this approach would affect the advertising rate structure for broadcasters, and whether cable operators are contractually or otherwise restricted from implementing a video server model of distributing local broadcast programming.

C. Voluntary Carriage Agreements

128. In the *Notice*, we recognized that most commercial broadcast stations, at least 80% in 1993 for example, were carried by cable systems through retransmission consent and asked whether this general pattern would be repeated with respect to digital broadcast television signals during the transition period.[374] We stated that the broadcasters that are most likely to elect must carry are those stations that are not affiliated with the four major networks. Many of these stations will not commence digital operations until 2002 when they are required to do so under the Commission's rules.[375] We sought comment on these general suppositions and on the effect these market factors would have on the need to

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[368] Imedia is one such company that provides cable operators with the technology to filter digital program packages.

[369]This statistic was taken from *ex parte* comments made by Cox Communications on November 15, 1999.

[370]*Id.*

[371]*Id.*

[372]*Id.*

[373]*Id.* at 3.

[374] *DTV Must Carry Notice*, 13 FCC Rcd. at 15110.

[375]*Id.*

implement a digital carriage requirement.[376] We also asked what effect not setting rules would have on television stations not affiliated with the top four networks that want to commence digital broadcasting before 2002.[377] We sought comment on how retransmission consent, rather than mandatory carriage, could speed the transition to digital television.[378]

129. According to the cable commenters, several digital retransmission consent agreements have been reached. For example, AT&T Broadband has arrangements with NBC and FOX to carry their owned and operated stations' digital signals for the next several years.[379] Time Warner states it has digital carriage arrangements with all four major networks some network affiliate owners,[380] as well as a group of public broadcasters.[381] While we are encouraged that some broadcasters, such as those noted above, have been able to obtain cable carriage through retransmission consent agreements, outstanding questions remain concerning the scope and pace of the retransmission consent process. For example, MSTV reports that cable operators have negotiated digital carriage with network owned and operated stations but have refused to discuss digital retransmission consent with several network affiliated station groups.[382] We seek comment on whether this statement is correct. If so, why haven't cable operators entered into negotiations with network affiliated broadcast groups?

130. With regard to the retransmission consent deals already concluded, we seek comment on the scope of such agreements. For example, while Time Warner has deals with CBS, ABC, NBC, FOX, and several PBS affiliates, we seek comment on how many digital television signals are now available for purchase by subscribers. Moreover, on what tier of service are these signals being carried? We also ask whether such signals are being carried in 8 VSB or in QAM. What television markets do these deals affect? And in those markets, what percentage of cable subscribers are served by a Time Warner system? And of those systems, do the deals apply only to upgraded 750 MHz systems or all systems regardless of capacity? At first glance, Time Warner's efforts seem to satisfy our goal of providing cable subscribers' access to digital television signals on a voluntary basis, but if the agreements only concern certain areas and certain systems, it would call into question the extent to which the marketplace is actually working. We pose the same set of questions and concerns to the other publicly announced arrangements involving other cable operators, such as AT&T and its respective broadcast station partners.

131. We also note that in August of 1999, the Commission adopted new ownership rules that affect the number of television stations in any given market that can be owned or controlled by a single

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[376] *Id.*

[377] *Id.* at 15111.

[378] *Id.*

[379] *See* AT&T-NBC's Digital Dance, *Broadcasting & Cable*, June 14, 1999, at 9; AT&T Broadband & Internet Services and Fox Entertainment Group Enter Into Long-Term Retransmission and Digital Agreement for Fox Owned-and-Operated Stations, AT&T News Release, September 2, 1999.

[380] *See*, *e.g.*, *Time Warner Cable and Belo Announce Texas News Partnerships*, Press Release, September 25, 2000; *Hearst-Argyle Television and Time Warner Cable Reach Agreement on Carriage of Local Television Stations*, Press Release, August 14, 2000.

[381] *See Public Television and Time Warner Cable Agree on Digital Carriage*, Press Release, September 19, 2000.

[382] *Ex Parte* letter submitted by MSTV, November 9, 1999.

broadcaster.[383] We seek comment on the effect of these ownership changes on carriage of broadcast signals and ask how the potential changes in the broadcast industry will affect the retransmission consent process.

D. Tier Placement

132. As discussed above, Section 623(b)(7)(A) of the Act requires that the basic tier on a rate regulated system include all signals carried to fulfill the must carry requirements of Sections 614 and 615 and "any signal of any television broadcast station that is provided by the cable operator to any subscriber. . ."[384] We believe that it would facilitate the digital transition to permit cable operators that are carrying a broadcast station's analog signal on the basic tier to carry that broadcast station's digital signal on a digital tier pursuant to retransmission consent. We seek comment on permitting such carriage and whether it would encourage more cable operators to voluntarily carry a broadcaster's digital signal. We believe that such an approach, which is necessarily limited to the duration of the transition in a given market, is consistent with the flexibility given the Commission by Section 614(b)(4)(B) to prescribe rules for the transition. We seek comment on this interpretation. We also seek comment on limiting this approach to those situations in which the digital programming is a simulcast of the analog programming available on the basic tier. We reiterate that, as discussed above, if a cable operator is carrying only the broadcaster's digital signal, and not the analog signal, the digital signal must be available to subscribers on a basic tier to which subscription is required for access to any other tier.

E. Per Channel Rate Adjustments

133. We recognize that cable operators will be adding digital broadcast services to their channel line-ups in the years ahead. While the addition of such channels implicates our rate regulation rules, we received no comment on what impact this occurrence will have on our per channel rate adjustment methodology.[385] Thus, in addition to providing for the direct recovery of costs associated with adding digital broadcast programming, as explained above, we now propose to permit cable operators to adjust BST rates to reflect the addition of channels of digital broadcast programming, if the operator decides to place such programming on that tier. When developing rate regulations pursuant to the 1992 Cable Act, the Commission recognized that pricing incentives were important to encouraging voluntary increases in the number of channels of programming offered to cable subscribers.[386] The Commission also recognized that, even in a competitive environment, service increases would result in higher prices, just as service decreases should result in lower prices. The Commission developed a table of per channel rate adjustment factors based on an econometric model of the pricing behavior of systems facing competition.[387] The amount of the permitted adjustment varied with the number of channels offered on the system, the permitted adjustment per channel decreasing as the number of channels increases.[388] After

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[383] *See Review of the Commission's Regulations Governing Television Broadcasting*, 14 FCC Rcd. 12903 (1999).

[384] 47 U.S.C. § 543(b)(7)(A).

[385] *See* 47 C.F.R. §76.922(g).

[386] *See Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation*, Second Order on Reconsideration, Fourth Report and Order and Fifth Notice of Proposed Rulemaking, 9 FCC Rcd. 4119, 4237 (1994) ("*Second Rate Reconsideration Order*").

[387] *See* 47 C.F.R. 76.922(g); *see also Second Rate Reconsideration Order*, 9 FCC Rcd. at Table A-3.

[388] *Second Rate Reconsideration Order*, 9 FCC Rcd. at 4239-45.

gaining experience with rate regulation, the Commission concluded that optional additional incentives should be available to stimulate the addition of new services to the CPST or to the BST when it was the only tier of service offered.[389] The Commission also recognized that the base cost for a tier should be adjusted under some circumstances to reflect the reallocation of system costs to programming tiers when channels are moved between tiers.[390]

134. We believe that cable operators should have sufficient incentives to add digital television broadcast programming, particularly where operators carrying a broadcast station's analog signal during the transition period must assign spectrum to accommodate digital signals. Because the cable industry operates in an increasingly competitive environment, we tentatively conclude that subscribers who purchase digital programming, including digital broadcast programming, should bear a fair share of the overall system costs associated with the number of channels delivered on the tier relative to the system's overall capacity, and that subscriber rates be reasonable. Thus, we propose to allow cable operators adding digital broadcast signals to their channel line-ups, to increase rates for each 6 MHz of capacity devoted to carriage of such signals. We seek comment on this general policy and ask for comment on the proper adjustment methodology the Commission should adopt. For example, should the Commission revise Section 76.922(g), and the accompanying per channel adjustment table, for this purpose? Alternatively, is the Form 1235 process outlined above, adequate to account for such costs? We also seek comment on how channels should be counted in light of the sunset of CPST rate regulation. What methods are there for valuing cable channels? How would they work?

F. Satellite Home Viewer Improvement Act of 1999

135. Section 338 of the Act, adopted as part of the SHVIA,[391] requires satellite carriers, by January 1, 2002, "to carry upon request all local television broadcast stations' signals in local markets in which the satellite carriers carry at least one television broadcast station signal," subject to the other carriage provisions contained in the Act. Until January 1, 2002, satellite carriers, such as DirecTV and Echostar, are granted a royalty-free copyright license to retransmit television broadcast signals on a station-by-station basis, subject to obtaining a broadcaster's retransmission consent. This transition period is intended to provide the satellite industry with time to begin providing local television signals

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[389] The Commission established a per channel adjustment factor of up to 20 cents per channel exclusive of programming costs for channels added to CPSTs , subject to a cap of $1.20 on rate increases through December 31, 1996 and $1.40 through December 31, 1997. An additional capped amount was allowed for license fees associated with the channels. Operators were required to offset any revenues received from a channel from the programming costs and per-channel adjustment associated with the channel. *Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation*, Sixth Order on Reconsideration, Fifth Report and Order, and Seventh Notice of Proposed Rulemaking, 10 FCC Rcd. 1226, 1248-57 (1994) ("*Sixth Reconsideration Order* "). The Commission limited the per channel adjustment incentive to the CPST to maximize subscriber choice where cable operators could choose between the BST and the CPST when selecting a tier for a new nonbroadcast service and also to avoid increasing the complexity of the regulatory task faced by local regulatory authorities.

[390] *See Sixth Reconsideration Order*, 10 FCC Rcd. at 1256-57.

[391] Pub. Law 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999). The Commission adopted the *Notice of Proposed Rulemaking* to implement Section 338 on May 31, 2000. *See Implementation of the Satellite Home Viewer Improvement Act of 1999—Broadcast Signal Carriage Issues*, Notice of Proposed Rulemaking, 15 FCC Rcd 12147 (2000).

into local markets, otherwise known as "local-into-local" satellite service. We recently adopted rules to implement the satellite carriage provisions contained in Section 338.[392]

136. The rules we adopted in the satellite carriage proceeding specifically concerned the carriage of a television station's analog signal by a satellite carrier. While issues related to the carriage of a television station's digital signal were discussed, the Commission stated that the digital carriage requirements for satellite carriers should be addressed in the context of this docket.[393] Herein, we have adopted policies governing the cable carriage of digital television signals. Given the SHVIA's general thrust that the Commission issue satellite carriage rules comparable to the cable carriage rules,[394] we seek comment on how we should apply the digital cable carriage rules to satellite carriers. We note that satellite carriers provide video programming on a national basis through a space-based delivery facility while cable operators provide video service on a local franchise-area basis through a terrestrial delivery facility. Given these distinctions, we ask whether we should take into account the differences between the two technologies when implementing digital broadcast signal carriage rules for satellite carriers. Interested parties need not file additional comments on the constitutional or public policy aspects of satellite digital broadcast signal carriage, as we shall incorporate the relevant statements made in the satellite carriage proceeding into this docket.

137. Pursuant to the SHVIA, the Commission also adopted rules implementing Section 339(b) of the Act. This provision directs the Commission to apply the cable television network non-duplication, syndicated program exclusivity, and sports blackout requirements to satellite carriers.[395] Congress directed the Commission to implement the new satellite rules so that they will be "as similar as possible" to the rules applicable to cable operators.[396] In general, the new network non-duplication, syndicated program exclusivity, and sports blackout rules require a satellite carrier to delete programming when it retransmits a nationally distributed superstation to a household within the relevant zone of protection, and the nationally distributed superstation carries a program to which the local station or the rights holder to a sporting event has exclusive rights. In addition, the SHVIA requires that the Commission apply the sports blackout rule to satellite carriage of network stations. In all cases covered by the statute and the rules, the entity holding exclusive rights may require the satellite carrier to black out these particular programs for the satellite subscriber households within the protected zone. In the Report and Order implementing Section 339(b), the Commission noted that it would consider the application of the satellite exclusivity rules to digital broadcast signals in another proceeding.[397] We now seek comment on the application of the Section 339(b) provisions, and our implementing rules, to the carriage of digital television signals by satellite carriers. We specifically seek comment on the application of the exclusivity requirements in light of the statements made above. The comments filed on this subject in CS Docket 00-2 will be incorporated by reference in this proceeding.

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[392] *Implementation of the Satellite Home Viewer Improvement Act of 1999: Broadcast Signal Carriage Issues*, Report and Order, FCC 00-417 (adopted November 29, 2000).

[393] *Id.* at paras. 125-129.

[394] 47 U.S.C. §338(g).

[395] *See SHVIA Non-duplication, Syndicated Exclusivity, and Sports Blackout Order* FCC No. 00-388 at para. 36.

[396] Joint Explanatory Statement of the Committee of Conference on H.R. 1554, 106th Cong. , 145 Cong. Rec. H11793, H11796 (daily ed. Nov. 9, 1999). *See also*, 47 U.S.C. 339(b)(1)(B).

[397] *See SHVIA Non-duplication, Syndicated Exclusivity, and Sports Blackout Order* at para. 75.

VIII. PROCEDURAL MATTERS

A. Paperwork Reduction Act of 1995 Analysis

138. The requirements contained in this *Report and Order and Further Notice of Proposed Rulemaking* have been analyzed with respect to the Paperwork Reduction Act of 1995 (the "1995 Act") and would impose new and modified information collection requirements on the public. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the proposed information collection requirements contained in this *Report and Order and Further Notice of Proposed Rulemaking*, as required by the 1995 Act. Public comments are due 60 days from date of publication of this *Report and Order and Further Notice of Proposed Rulemaking* in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information would have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. Written comments by the public on the new and/or modified information collections are due on or before 60 days after the date of publication in the Federal Register. Any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, 445 12th St, S.W., Room 1-0804, Washington, D.C. 20554, or via the Internet to jboley@fcc.gov. For additional information on the proposed information collection requirements, contact Judy Boley at 202-418-0214 or via the Internet at the above address.

B. Ex Parte Rules

139. This proceeding will be treated as a "permit-but-disclose" proceeding subject to the "permit-but-disclose" requirements under Section 1.1206(b) of the rules.[398] *Ex parte* presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, ex parte or otherwise, are generally prohibited. Persons making oral *ex parte* presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.[399] Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

C. Filing of Comments and Reply Comments

140. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415 and 1.419, interested parties may file comments on the *Notice* on or before the date 45 days from the date of publication in the Federal Register and reply comments on or before the date 90 days from the date of publication in the Federal Register. Comments may be filed using the Commission's Electronic Comment Filing System ("ECFS") or by filing paper copies.[400]

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[398] 47 C.F.R. §1.1206(b) (as revised).

[399] *See* 47 C.F.R. §1.1206(b)(2) (as revised).

[400] *See In re Electronic Filing of Documents in Rulemaking Proceedings*, 13 FCC Rcd. 11322 (1998) (amending Parts 0 and 1 of the Commission's rules to allow electronic filing of comments and other pleadings).

Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form<your e-mail address." A sample form and directions will be sent in reply.

141. Parties who choose to file by paper must file an original and four copies of each filing. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. If more than one docket or rulemaking number appears in the caption of this proceeding commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554. The Cable Services Bureau contact for this proceeding is Eloise Gore at (202) 418-7200, TTY (202) 418-7172, or at egore@fcc.gov .

142. Parties who choose to file by paper should also submit their comments on diskette. Parties should submit diskettes to Eloise Gore Cable Services Bureau, 445 12th Street N.W., Room 4-A803, Washington, D.C. 20554. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible form using MS DOS 5.0 and Microsoft Word, or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the party's name, proceeding (including the lead docket number in this case [CS Docket No. 98-120]), type of pleading (comments or reply comments), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, referable in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, 1231 20th Street, N.W., Washington, D.C. 20036

D. Final Regulatory Flexibility Act Analysis

143. The Regulatory Flexibility Analysis for the *Report and Order* is found in Appendix B, attached.

E. Initial Regulatory Flexibility Act Analysis

144. The Regulatory Flexibility Analysis for the *FNPRM* is found in Appendix C, attached.

F. Ordering Clauses

145. Accordingly, **IT IS ORDERED** that, pursuant authority found in Sections 4(i) 4(j), 303(r), 325, 336, 614, and 615 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), 325, 336, 534, and 535, the Commission's rules **ARE HEREBY AMENDED** as set forth in Appendix D.

146. **IT IS FURTHER ORDERED** that the Consumer Information Bureau, Reference Information Center, **SHALL SEND** a copy of this *Report and Order and Further Notice of Proposed Rulemaking*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

147. **IT IS FURTHER ORDERED** that the rules adopted in this *Report and Order and Further Notice of Proposed Rulemaking* **SHALL TAKE EFFECT** upon publication in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

Appendix A

Comments Filed in CS 98-120

A & E Television Networks ("A&E")
Adelphia et. al. (including Arizona Cable Television Ass'n; Insight Comm.; Suburban Cable; MediaCom; PrimeCo; and Telemedia)
America's Health Network et. al. (including Great American Country; Knowledge TV; Outdoor Life; Speedvision; the Golf Channel) ("AHN")
Ameritech New Media ("Ameritech")
Arkansas Broadcasters Ass'n ("ABA")
Armstrong Holdings and Intermountain Cable Inc. ("Armstrong")
Association of America's Public Television Stations, the Public Broadcasting System, and the Corporation for Public Broadcasting ("AAPTS")
Association of Local Television Stations ("ALTV")
Atlanta Interfaith Broadcasters, Inc.
BellSouth Corp. and BellSouth Interactive Media Services ("BellSouth")
Black Entertainment Television ("BET")
Broadcast Group (includes Benedek; Chronicle; Draper; LIN; Midwest; Paxton; Raycom; and Spartan)
Community Broadcasters Association ("CBA")
C-Span Networks
Citizen Comments (38 individual C-Span viewers)
Cable Telecommunications Ass'n ("CATA")
Cablevision Systems Corp.
Capitol Broadcasting
Chris-Craft/United Group
Circuit City Stores
Congressionals (Letters from Congress supporting/opposing DTV Must Carry)
Consumer Electronics Manufacturers Ass'n ("CEMA")
Cordillera Comm.
Corporation for General Trade ("CGT")
Courtroom Television Network
Discovery Networks
Encore Media Group
Entravision Holdings
Gemstar/Starsight
General Instruments ("GI")
Golden Orange Broadcasting
Granite Broadcasting
GTE
Harris Corp.
Home Box Office and Turner Broadcasting System
Home and Garden Television ("HGTV") and TV Food
Hildreth Comments (including Pikes Peak Broadcasting Company; Jasas Corp.; GRK Productions; Morris Network; Palazuelos; Thomas Broadcasting Company; Guenter Marksteiner)
International Broadcasting Network
International Cable Channels Partnership
King World Productions
KSLS, Inc./KHLS, Inc.

Lifetime Entertainment Services ("Lifetime")
Lee Enterprises
Maranatha Broadcasting
Media Institute
MediaOne
Michigan Government Television
Microsoft
Mitsubishi
Morgan Murphy and Cosmo Broadcasting
Motion Picture Association of America ("MPAA")
MSTV (Association for Maximum Service Television)
National Ass'n of Broadcasters ("NAB")
National Ass'n for the Deaf
National Cable Television Ass'n ("NCTA")
National Datacast
NBC
Network Affiliates Station Alliance ("NASA")
New World Paradigm
Ovation, Inc.
Pappas Telecasting
Paxson Comm. Corp.
Pegasus Comm. Corp.
Pellegrin Comments (on behalf of small cable systems)
Pennsylvania Cable Networks
Phillips Electronics North America Corp.
Polar Broadcasting
Retlaw Enterprises
Shwartz, Woods, and Miller Comments (representing 13 public broadcasting entities) ("Shwartz")
Shockley Communications Corp.
Sinclair Broadcast Group
Small Cable Business Ass'n ("SCBA")
Sony Electronics Inc.
State Broadcasters Associations (representing 26 separate associations)
Station Representatives Ass'n
TCI (now AT&T Broadband)
Thompson Consumer Electronics
Time Warner Cable
Trinity Broadcasting Network
United Church of Christ ("UCC") et. al. (including Media Access Project; Benton Foundation; Center for Media Education; and the Civil Rights Forum)
UPN Affiliates Association
Weather Channel
Wireless Communications Association Int'l ("WCA")
Wisdom Network
ZDTV
Zenith Electronics
5C (including Hitachi, Intel, Matsushita, Sony and Toshiba)

Reply Comments filed in CS Docket 98-120

A & E Television Networks
Adelphia et. al.
Ameritech New Media
American Chestnut Television
America's Voice
Armstrong Holdings and Intermountain Cable Inc.
AAPTS
ALTV
BellSouth
BET
Broadcast Group
C-Span Networks
CATA
Cablevision Systems Corp.
California Channel
Carolina Christian Broadcasting
Circuit City Stores
Consumer Electronics Manufacturers Ass'n
Corday Media Group
Council of Organizational Representatives of National Issues Concerning People Who are Deaf or Hard of Hearing
Discovery Networks
Gemstar/Starsight
General Instruments
Golden Orange Broadcasting
GRK Productions Joint Venture
GTE
Home Box Office and Turner Broadcasting System
International Cable Channels Partnership
LeSea Broadcasting
Lifetime
Lincoln Broadcasting Company
Maranatha Broadcasting
Matsushita
Michigan Gov't Television
Microsoft
Mitsubishi
Morgan Murphy and Cosmo Broadcasting
MSTV
NAB
National Association of Telecommunications Officers and Advisors ("NATOA")
NCTA
National Datacast
New World Paradigm
Pappas Telecasting
Paxson Comm. Corp.
Phillips Electronics North America Corp.
Prevue Networks

Retlaw Enterprises
Sinclair Broadcasting
SCBA
Sony Electronics Inc.
Thompson Consumer Electronics
Time Warner Cable
UCC
Univision Communications, Inc.
Weather Channel
Wireless Communications Association Int'l
Zenith Electronics
5C (including Hitachi, Intel, Matsushita, Sony and Toshiba)

Appendix B

Final Regulatory Flexibility Act Analysis For the Report and Order

1. As required by the Regulatory Flexibility Act ("RFA"),[1] the Commission has prepared this Final Regulatory Flexibility Analysis ("FRFA") of the possible significant economic impact on small entities by the policies and rules found in this *Report and Order*. The *Report and Order* and FRFA (or summaries thereof) will be published in the Federal Register.[2]

2. *Need for, and Objectives of, the Proposed Rule Changes*. The objective of the *Report and Order* is to make certain technical and substantive rule changes that bear on the issue of carriage of digital broadcast signals.

3. *Summary of Significant Issues Raised by Public Comments in Response to the IRFA.* The Small Cable Business Association ("SCBA," now known as the American Cable Association, ACA) filed comments as described in the *Report and Order, supra.* SCBA stated that unregulated analog retransmission consent demands, and tying in particular, threatens small cable operators' financial viability.[3] To remedy the situation, the SCBA urged the Commission to prohibit broadcasters from tying analog carriage to digital carriage.[4]

4. *Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply*. The FRFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules.[5] The FRFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small business concern" under Section 3 of the Small Business Act.[6] Under the Small Business Act, a small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").[7] The rules we adopt in this *Report & Order* will affect cable operators and OVS operators.

5. *Small MVPDs*. SBA has developed a definition of small entities for cable and other pay television services, which includes all such companies generating $11 million or less in annual receipts.[8]

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[1]*See* 5 U.S.C. §604. The RFA has been amended by the *Contract With America Advancement Act of 1996*, Pub. L. No. 104-121, 110 Stat. 847 (1996) ("CWAAA"). *See* 5 U.S.C. §601 et. seq. Title II of the CWAAA is the *Small Business Regulatory Enforcement Fairness Act of 1996* ("SBREFA").

[2]*See id.*

[3]SCBA Comments at 24. SCBA is now known as American Cable Association ("ACA").

[4]*Id.*; a*ccord* Pellegrin Comments at 6.

[5]5 U.S.C. §604(b).

[6]5 U.S.C. §601(3) and (6).

[7]15 U.S.C. §632.

[8]13 C.F.R. §121.201 (SIC 4841).

This definition includes cable system operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems and subscription television services. According to the Census Bureau data from 1992, there were 1,758 total cable and other pay television services and 1,423 had less than $11 million in revenue.[9] We address below each service individually to provide a more precise estimate of small entities.

6. *Cable Systems*. The Commission has developed, with SBA's approval, our own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.[10] We last estimated that there were 1439 cable operators that qualified as small cable companies.[11] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1439 small entity cable system operators that may be affected by the decisions and rules adopted in this *Report and Order*.

7. The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[12] The Commission has determined that there are 61,700,000 subscribers in the United States. Therefore, an operator serving fewer than 617,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed $250 million in the aggregate.[13] Based on available data, we find that the number of cable operators serving 617,000 subscribers or less totals approximately 1450.[14] Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed $250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

8. *Open Video Systems*. The Commission has certified 31 OVS operators with some now providing service. Affiliates of Residential Communications Network, Inc. ("RCN") received approval to operate OVS systems in New York City, Boston, Washington, D.C. and other areas. RCN has sufficient revenues to assure us that they do not qualify as small business entities. Little financial information is available for the other entities authorized to provide OVS that are not yet operational. Given that other entities have been authorized to provide OVS service but have not yet begun to generate revenues, we conclude that at least some of the OVS operators qualify as small entities.

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[9] U.S. Department of Commerce, Bureau of the Census, Industry and Enterprise Receipts Size report, Table 2D, SIC 4841 (Bureau of the Census data under contract to the Office of Advocacy of the SBA).

[10] 47 C.F.R. §76.901(e). The Commission developed this definition based on its determinations that a small cable system operator is one with annual revenues of $100 million or less. *Sixth Report and Order and Eleventh Order on Reconsideration*, MM Dkt Nos. 92-266 and 93-215, 10 FCC Rcd. 7393 (1995).

[11] Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

[12] 47 U.S.C. §543(m)(2).

[13] 47 C.F.R. §76.1403(b).

[14] Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

9. *Program Producers and Distributors.* The Commission has not developed a definition of small entities applicable to producers or distributors of cable television programs. Therefore, we will use the SBA classifications of Motion Picture and Video Tape Production (SIC 7812),[15] Motion Picture and Video Tape Distribution (SIC 7822),[16] and Theatrical Producers (Except Motion Pictures) and Miscellaneous Theatrical Services (SIC 7922).[17] These SBA definitions provide that a small entity in the cable television programming industry is an entity with $21.5 million or less in annual receipts for SIC 7812 and SIC 7822, and $5 million or less in annual receipts for SIC 7922.[18] Census Bureau data indicate the following: (a) there were 7,265 firms in the United States classified as Motion Picture and Video Production (SIC 7812), and that 6,987 of these firms had $16.999 million or less in annual receipts and 7,002 of these firms had $24.999 million or less in annual receipts;[19] (b) there were 1,139 firms classified as Motion Picture and Video Tape Distribution (SIC 7822), and 1007 of these firms had $16.999 million or less in annual receipts and 1013 of these firms had $24.999 million or less in annual receipts; and (c) there were 5,671 firms in the United States classified as Theatrical Producers and Services (SIC 7922), and 5627 of these firms had $4.999 million or less in annual receipts.[20]

10. Each of these SIC categories is very broad and includes firms that may be engaged in various industries, including cable programming. Specific figures are not available regarding how many of these firms exclusively produce and/or distribute programming for cable television or how many are independently owned and operated. Thus, we estimate that our rules may affect approximately 6,987 small entities primarily engaged in the production and distribution of taped cable television programs and 5,627 small producers of live programs that may be affected by the rules adopted in this proceeding.

11. *Television Stations.* The proposed rules and policies will apply to television broadcasting licensees, and potential licensees of television service. The Small Business Administration defines a television broadcasting station that has no more than $10.5 million in annual receipts as a small business.[21] Television broadcasting stations consist of establishments primarily engaged in broadcasting visual

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[15]"Establishments primarily engaged in the production of theatrical and nontheatrical motion pictures and video tapes for exhibition or sale, including educational, industrial, and religious films. Included in the industry are establishments engaged in both production and distribution. Producers of live radio and television programs are classified in Industry 7922. Standard Industrial Classification Manual, SIC 7812, Executive Office of the President, Office of Management and Budget (1987) ("OMB SIC Manual").

[16]"Establishments primarily engaged in the distribution (rental or sale) of theatrical and nontheatrical motion picture films or in the distribution of video tapes and disks, except to the general public." OMB SIC Manual, SIC 7822.

[17]"Establishments primarily engaged in providing live theatrical presentations, such as road companies and summer theaters. . . . Also included in this industry are producers of . . . live television programs." OMB SIC Manual, SIC 7922.

[18]13 C.F.R. §121.201.

[19]U.S. Small Business Administration 1992 Economic Census Industry and Enterprise Report, Table 2D, SIC 7812, (U.S. Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration) ("SBA 1992 Census Report"). Because the Census data do not include a category for $21.5 million, we have reported the closest increment below and above the $21.5 million threshold. There is a difference of 15 firms between the $16,999 and $24,999 million annual receipt categories. It is possible that these 15 firms could have annual receipts of $21.5 million or less and would therefore be classified as small businesses.

[20]SBA 1992 Census Report, SIC 7922.

[21]13 C.F.R. § 121.201, Standard Industrial Code (SIC) 4833 (1996).

programs by television to the public, except cable and other pay television services.[22] Included in this industry are commercial, religious, educational, and other television stations.[23] Also included are establishments primarily engaged in television broadcasting and which produce taped television program materials.[24] Separate establishments primarily engaged in producing taped television program materials are classified under another SIC number.[25]

12. Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency after consultation with the Office of Advocacy of the SBA and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

13. An element of the definition of "small business" is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. Accordingly, the estimates that follow of small businesses to which rules may apply do not exclude any television station from the definition of a small business on this basis and are therefore overinclusive to that extent. An additional element of the definition of "small business" is that the entity must be independently owned and operated. As discussed further below, we could not fully apply this criterion, and our estimates of small businesses to which rules may apply may be overinclusive to this extent. The SBA's general size standards are developed taking into account these two statutory criteria. This does not preclude us from taking these factors into account in making our estimates of the numbers of small entities.

14. There were 1,509 television stations operating in the nation in 1992.[26] That number has remained fairly constant as indicated by the approximately 1,616 operating television broadcasting stations in the nation as of September 30, 1999.[27] For 1992, the number of television stations that produced less than

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[22]Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities, Establishment and Firm Size, Series UC92-S-1, Appendix A-9 (1995).

[23]*Id. See* Executive Office of the President, Office of Management and Budget, Standard Industrial Classification Manual (1987), at 283, which describes "Television Broadcasting Stations (SIC Code 4833)" as:

> Establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services. Included in this industry are commercial, religious, educational and other television stations. Also included here are establishments primarily engaged in television broadcasting and which produce taped television program materials.

[24]Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities, Establishment and Firm Size, Series UC92-S-1, Appendix A-9 (1995).

[25]*Id.*; SIC 7812 (Motion Picture and Video Tape Production); SIC 7922 (Theatrical Producers and Miscellaneous Theatrical Services (producers of live radio and television programs).

[26]FCC News Release No. 31327, Jan. 13, 1993; Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, Appendix A-9.

[27]FCC News Release, Broadcast Station Totals as of September 30, 1999 (released November 22, 1999).

$10.0 million in revenue was 1,155 establishments.[28] Thus, the new rules will affect approximately 1,616 television stations; approximately 77%, of those stations are considered small businesses.[29] These estimates may overstate the number of small entities since the revenue figures on which they are based do not include or aggregate revenues from non-television affiliated companies.

15. *Small Manufacturers*. The SBA has developed definitions of small entity for manufacturers of household audio and video equipment (SIC 3651) and for radio and television broadcasting and communications equipment (SIC 3663). In each case, the definition includes all such companies employing 750 or fewer employees. Census Bureau data indicates that there are 858 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.[30]

16. *Electronic Equipment Manufacturers*. The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment. Therefore, we will use the SBA definition of manufacturers of Radio and Television Broadcasting and Communications Equipment.[31] According to the SBA's regulations, a TV equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.[32] The Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment or how many are independently owned and operated. We conclude that there are approximately 778 small manufacturers of radio and television equipment.

17. *Electronic Household/Consumer Equipment*. The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment used by consumers, as compared to industrial use by television licensees and related businesses. Therefore, we will use the SBA definition applicable to manufacturers of Household Audio and Visual Equipment. According to the SBA's regulations, a household audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.[33] Census Bureau data indicates that there are 410 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 386 of these firms have fewer than 500 employees and would be classified as small entities.[34] The remaining 24 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA

[28]The amount of $10 million was used to estimate the number of small business establishments because the relevant Census categories stopped at $9,999,999 and began at $10,000,000. No category for $10.5 million existed. Thus, the number is as accurate as it is possible to calculate with the available information.

[29]We use the 77 percent figure of TV stations operating at less than $10 million for 1992 and apply it to the 1999 total of 1,616 TV stations to arrive at the total number of stations categorized as small businesses.

[30]U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities, Table 1D, (issued May 1995), SIC category 3663.

[31]This category excludes establishments primarily engaged in the manufacturing of household audio and visual equipment which is categorized as SIC 3651.

[32]13 C.F.R. §121.201, SIC Code 3663.

[33]13 C.F.R. §121.201, SIC Code 3651.

[34]U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3651, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

definition. Furthermore, the Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment for consumers or how many are independently owned and operated. We conclude that there are approximately 386 small manufacturers of television equipment for consumer/household use.

18. *Computer Manufacturers*. The Commission has not developed a definition of small entities applicable to computer manufacturers. Therefore, we will use the SBA definition of Electronic Computers. According to SBA regulations, a computer manufacturer must have 1,000 or fewer employees in order to qualify as a small entity.[35] Census Bureau data indicates that there are 716 firms that manufacture electronic computers and of those, 659 have fewer than 500 employees and qualify as small entities.[36] The remaining 57 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 1,000 employees and therefore also qualify as small entities under the SBA definition. We conclude that there are approximately 659 small computer manufacturers.

19. *Description of Projected Reporting, Record Keeping and other Compliance Requirements*. There are compliance requirements for cable operators and OVS operators as a result of the *Report and Order*. An attempt has been made to streamline compliance requirements. For example, we have declined to adopt specific channel positioning requirements for digital television signals.

20. *Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered*. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. The Small Cable Business Association ("SCBA," now known as the American Cable Association, ACA) filed comments as described in the *Report and Order, supra.* SCBA stated that unregulated analog retransmission consent demands, and tying in particular, threatens small cable operators' financial viability.[37] To remedy the situation, the SCBA urged the Commission to prohibit broadcasters from tying analog carriage to digital carriage.[38]We have deferred imposing a dual analog and digital broadcast signal carriage requirement on cable operators, including small cable operators, as well as OVS operators, at this time. However, we have adopted several retransmission consent policies and digital-only carriage requirements applicable to all cable operators and OVS operators. Due to lack of sufficient evidence on the record, we have decided not to prohibit retransmission consent tying arrangements, as requested by the SCBA. However, we are seeking further comment on this issue in the FNPRM. In the aggregate, we believe that there will be minimal impact on small entities as a result of the *Report and Order*. However, we are mindful of the concerns raised by small entities throughout this proceeding and will carefully scrutinize our policy determinations as we go forward.

[35] 13 C.F.R. §121.201, SIC Code 3571.

[36] U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3571, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

[37] SCBA Comments at 24. SCBA is now known as American Cable Association ("ACA").

[38] *Id.*; a*ccord* Pellegrin Comments at 6.

21. *Federal Rules Which Duplicate, Overlap, or Conflict with the Commission's Proposals.* None.

22. *Report to Congress*. The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.[39] In addition, the Commission will send a copy of the *Report and Order*, including FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register.[40]

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[39]*See* 5 U.S.C. §801(a)(1)(A).

[40]*See* 5 U.S.C. §604(b).

Appendix C

Initial Regulatory Flexibility Act Analysis For the Further Notice

1. As required by the Regulatory Flexibility Act ("RFA"),[1] the Commission has prepared this Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on small entities by the policies and rules referenced in this *Further Notice*. The Commission will send a copy of the *Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[2] In addition, the IRFA (or summaries thereof) will be published in the Federal Register.[3]

2. *Need for, and Objectives of, the Proposed Rule Changes*. The objective of the *Further Notice* is to gather more information, and build the necessary record, in order to implement a constitutionally sustainable digital broadcast signal carriage policy.

3. *Legal Basis*. The authority for the action proposed in this rulemaking is contained in Sections 1, 4(i) and (j), 309(j), 325, 336, 614, and 615 of the Communications Act of 1934, as amended, 47 U.S.C. §§151, 154(i) and (j), 309(j), 325, 336, 534, and 535.

4. *Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply*. The IRFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules.[4] The IRFA defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small business concern" under Section 3 of the Small Business Act.[5] Under the Small Business Act, a small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA").[6] The rules we are considering in this proceeding generally, will affect cable operators, OVS operators, and television station licensees.

5. *Small MVPDs*. SBA has developed a definition of small entities for cable and other pay television services, which includes all such companies generating $11 million or less in annual receipts.[7] This definition includes cable system operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems and subscription television services. According to the Census Bureau data from 1992, there were 1,758 total cable and other pay

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[1] *See* 5 U.S.C. §603. The RFA has been amended by the *Contract With America Advancement Act of 1996*, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). *See* 5 U.S.C. §601 et. seq. Title II of the CWAAA is the *Small Business Regulatory Enforcement Fairness Act of 1996* (“SBREFA”).

[2] *See* 5 U.S.C. §603(a).

[3] *See id.*

[4] 5 U.S.C. §603(b)(3).

[5] 5 U.S.C. §601(3) and (6).

[6] 15 U.S.C. §632.

[7] 13 C.F.R. §121.201 (SIC 4841).

television services and 1,423 had less than $11 million in revenue.[8] We address below each service individually to provide a more precise estimate of small entities.

6. *Cable Systems.* The Commission has developed, with SBA's approval, our own definition of a small cable system operator for the purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.[9] We last estimated that there were 1439 cable operators that qualified as small cable companies.[10] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, we estimate that there are fewer than 1439 small entity cable system operators that may be affected by the decisions and rules adopted in this *Report and Order.*

7. The Communications Act also contains a definition of a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1% of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[11] The Commission has determined that there are 61,700,000 subscribers in the United States. Therefore, an operator serving fewer than 617,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed $250 million in the aggregate.[12] Based on available data, we find that the number of cable operators serving 617,000 subscribers or less totals approximately 1450.[13] Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed $250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

8. *Open Video Systems.* The Commission has certified 31 OVS operators with some now providing service. Affiliates of Residential Communications Network, Inc. ("RCN") received approval to operate OVS systems in New York City, Boston, Washington, D.C. and other areas. RCN has sufficient revenues to assure us that they do not qualify as small business entities. Little financial information is available for the other entities authorized to provide OVS that are not yet operational. Given that other entities have been authorized to provide OVS service but have not yet begun to generate revenues, we conclude that at least some of the OVS operators qualify as small entities.

9. *Program Producers and Distributors.* The Commission has not developed a definition of small entities applicable to producers or distributors of cable television programs. Therefore, we will use

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[8]U.S. Department of Commerce, Bureau of the Census, Industry and Enterprise Receipts Size report, Table 2D, SIC 4841 (Bureau of the Census data under contract to the Office of Advocacy of the SBA).

[9]47 C.F.R. §76.901(e). The Commission developed this definition based on its determinations that a small cable system operator is one with annual revenues of $100 million or less. *Sixth Report and Order and Eleventh Order on Reconsideration*, MM Dkt Nos. 92-266 and 93-215, 10 FCC Rcd 7393 (1995).

[10]Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

[11]47 U.S.C. §543(m)(2).

[12]47 C.F.R. §76.1403(b).

[13]Paul Kagan Associates, Inc., Cable TV Investor, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

the SBA classifications of Motion Picture and Video Tape Production (SIC 7812),[14] Motion Picture and Video Tape Distribution (SIC 7822),[15] and Theatrical Producers (Except Motion Pictures) and Miscellaneous Theatrical Services (SIC 7922).[16] These SBA definitions provide that a small entity in the cable television programming industry is an entity with $21.5 million or less in annual receipts for SIC 7812 and SIC 7822, and $5 million or less in annual receipts for SIC 7922.[17] Census Bureau data indicate the following: (a) there were 7,265 firms in the United States classified as Motion Picture and Video Production (SIC 7812), and that 6,987 of these firms had $16.999 million or less in annual receipts and 7,002 of these firms had $24.999 million or less in annual receipts;[18] (b) there were 1,139 firms classified as Motion Picture and Video Tape Distribution (SIC 7822), and 1007 of these firms had $16.999 million or less in annual receipts and 1013 of these firms had $24.999 million or less in annual receipts; and (c) there were 5,671 firms in the United States classified as Theatrical Producers and Services (SIC 7922), and 5627 of these firms had $4.999 million or less in annual receipts.[19]

10. Each of these SIC categories is very broad and includes firms that may be engaged in various industries, including cable programming. Specific figures are not available regarding how many of these firms exclusively produce and/or distribute programming for cable television or how many are independently owned and operated. Thus, we estimate that our rules may affect approximately 6,987 small entities primarily engaged in the production and distribution of taped cable television programs and 5,627 small producers of live programs that may be affected by the rules adopted in this proceeding.

11. *DBS*: There are four licensees of DBS services under Part 100 of the Commission's Rules. Three of those licensees are currently operational. Two of the licensees that are operational have annual revenues which may be in excess of the threshold for a small business. The Commission, however, does not collect annual revenue data for DBS and, therefore, is unable to ascertain the number of small DBS licensees that could be impacted by these proposed rules. DBS service requires a great investment of capital for operation, and we acknowledge that there are entrants in this field that may not

[14]"Establishments primarily engaged in the production of theatrical and nontheatrical motion pictures and video tapes for exhibition or sale, including educational, industrial, and religious films. Included in the industry are establishments engaged in both production and distribution. Producers of live radio and television programs are classified in Industry 7922." Standard Industrial Classification Manual, SIC 7812, Executive Office of the President, Office of Management and Budget (1987) (OMB SIC Manual).

[15]"Establishments primarily engaged in the distribution (rental or sale) of theatrical and nontheatrical motion picture films or in the distribution of video tapes and disks, except to the general public." OMB SIC Manual, SIC 7822.

[16]"Establishments primarily engaged in providing live theatrical presentations, such as road companies and summer theaters. . . . Also included in this industry are producers of . . . live television programs." OMB SIC Manual, SIC 7922.

[17]13 C.F.R. §121.201.

[18]U.S. Small Business Administration 1992 Economic Census Industry and Enterprise Report, Table 2D, SIC 7812, (U.S. Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration) ("SBA 1992 Census Report"). Because the Census data do not include a category for $21.5 million, we have reported the closest increment below and above the $21.5 million threshold. There is a difference of 15 firms between the $16,999 and $24,999 million annual receipt categories. It is possible that these 15 firms could have annual receipts of $21.5 million or less and would therefore be classified as small businesses.

[19]SBA 1992 Census Report, SIC 7922.

yet have generated $11 million in annual receipts, and therefore may be categorized as a small business, if independently owned and operated.

12. *HSD*: The market for HSD service is difficult to quantify. Indeed, the service itself bears little resemblance to other MVPDs. HSD owners have access to more than 265 channels of programming placed on C-band satellites by programmers for receipt and distribution by MVPDs, of which 115 channels are scrambled and approximately 150 are unscrambled.[20] HSD owners can watch unscrambled channels without paying a subscription fee. To receive scrambled channels, however, an HSD owner must purchase an integrated receiver-decoder from an equipment dealer and pay a subscription fee to an HSD programming package. Thus, HSD users include: (1) viewers who subscribe to a packaged programming service, which affords them access to most of the same programming provided to subscribers of other MVPDs; (2) viewers who receive only non-subscription programming; and (3) viewers who receive satellite programming services illegally without subscribing. Because scrambled packages of programming are most specifically intended for retail consumers, these are the services most relevant to this discussion.[21]

13. According to the most recently available information, there are approximately 30 program packagers nationwide offering packages of scrambled programming to retail consumers.[22] These program packagers provide subscriptions to approximately 2,314,900 subscribers nationwide.[23] This is an average of about 77,163 subscribers per program package. This is substantially smaller than the 400,000 subscribers used in the commission's definition of a small MSO. Furthermore, because this is an average, it is likely that some program packagers may be substantially smaller.

14. *Television Stations.* The proposed rules and policies will apply to television broadcasting licensees, and potential licensees of television service. The Small Business Administration defines a television broadcasting station that has no more than $10.5 million in annual receipts as a small business.[24] Television broadcasting stations consist of establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services.[25] Included in this industry are commercial, religious, educational, and other television stations.[26] Also included are

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[20]Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, Third Annual Report, CS Docket No. 96-133, 12 FCC Rcd 4358, 4385 (1996)(*"Third Annual Report").*

[21]*Third Annual Report,* 12 FCC Rcd at 4385.

[22]*Id.*

[23]*Id.*

[24]13 C.F.R. § 121.201, Standard Industrial Code (SIC) 4833 (1996).

[25]Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities, Establishment and Firm Size, Series UC92-S-1, Appendix A-9 (1995).

[26]*Id. See* Executive Office of the President, Office of Management and Budget, Standard Industrial Classification Manual (1987), at 283, which describes "Television Broadcasting Stations (SIC Code 4833)" as:

Establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services. Included in this industry are commercial, religious, educational and other television stations. Also included here are establishments primarily engaged in television broadcasting and which produce taped television program materials.

establishments primarily engaged in television broadcasting and which produce taped television program materials.[27] Separate establishments primarily engaged in producing taped television program materials are classified under another SIC number.[28]

15. Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency after consultation with the Office of Advocacy of the SBA and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

16. An element of the definition of "small business" is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. Accordingly, the estimates that follow of small businesses to which rules may apply do not exclude any television station from the definition of a small business on this basis and are therefore overinclusive to that extent. An additional element of the definition of "small business" is that the entity must be independently owned and operated. As discussed further below, we could not fully apply this criterion, and our estimates of small businesses to which rules may apply may be overinclusive to this extent. The SBA's general size standards are developed taking into account these two statutory criteria. This does not preclude us from taking these factors into account in making our estimates of the numbers of small entities.

17. There were 1,509 television stations operating in the nation in 1992.[29] That number has remained fairly constant as indicated by the approximately 1,616 operating television broadcasting stations in the nation as of September 30, 1999.[30] For 1992, the number of television stations that produced less than $10.0 million in revenue was 1,155 establishments.[31] Thus, the new rules will affect approximately 1,616 television stations; approximately 77%, of those stations are considered small businesses.[32] These estimates may overstate the number of small entities since the revenue figures on which they are based do not include or aggregate revenues from non-television affiliated companies.

18. *Small Manufacturers*. The SBA has developed definitions of small entity for manufacturers of household audio and video equipment (SIC 3651) and for radio and television broadcasting and communications equipment (SIC 3663). In each case, the definition includes all such

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[27]Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications and Utilities, Establishment and Firm Size, Series UC92-S-1, Appendix A-9 (1995).

[28]*Id.*; SIC 7812 (Motion Picture and Video Tape Production); SIC 7922 (Theatrical Producers and Miscellaneous Theatrical Services (producers of live radio and television programs).

[29]FCC News Release No. 31327, Jan. 13, 1993; Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, Appendix A-9.

[30]FCC News Release, Broadcast Station Totals as of September 30, 1999 (released November 22, 1999).

[31]The amount of $10 million was used to estimate the number of small business establishments because the relevant Census categories stopped at $9,999,999 and began at $10,000,000. No category for $10.5 million existed. Thus, the number is as accurate as it is possible to calculate with the available information.

[32]We use the 77 percent figure of TV stations operating at less than $10 million for 1992 and apply it to the 1999 total of 1,616 TV stations to arrive at the total number of stations categorized as small businesses.

companies employing 750 or fewer employees. Census Bureau data indicates that there are 858 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.[33]

19. *Electronic Equipment Manufacturers.* The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment. Therefore, we will use the SBA definition of manufacturers of Radio and Television Broadcasting and Communications Equipment.[34] According to the SBA's regulations, a TV equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.[35] The Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment or how many are independently owned and operated. We conclude that there are approximately 778 small manufacturers of radio and television equipment.

20. *Electronic Household/Consumer Equipment.* The Commission has not developed a definition of small entities applicable to manufacturers of electronic equipment used by consumers, as compared to industrial use by television licensees and related businesses. Therefore, we will use the SBA definition applicable to manufacturers of Household Audio and Visual Equipment. According to the SBA's regulations, a household audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.[36] Census Bureau data indicates that there are 410 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 386 of these firms have fewer than 500 employees and would be classified as small entities.[37] The remaining 24 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. Furthermore, the Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment for consumers or how many are independently owned and operated. We conclude that there are approximately 386 small manufacturers of television equipment for consumer/household use.

21. *Description of Projected Reporting, Recordkeeping and other Compliance Requirements.* There are compliance requirements for cable operators and OVS operators. An attempt has been made to propose streamlined compliance requirements, especially for small cable operators, in this docket.

22. *Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered.* The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or

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[33] U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities, Table 1D, (issued May 1995), SIC category 3663.

[34] This category excludes establishments primarily engaged in the manufacturing of household audio and visual equipment which is categorized as SIC 3651.

[35] 13 C.F.R. §121.201, SIC Code 3663.

[36] 13 C.F.R. §121.201, SIC Code 3651.

[37] U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3651, (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities. We have proposed streamlined rules for the carriage of digital broadcast signals for small cable operators in this proceeding. We will examine this alternative in more detail in the next phase of this rulemaking.

23. *Federal Rules Which Duplicate, Overlap, or Conflict with the Commission's Proposals*. None.

24. *Report to Congress*. The Commission will send a copy of the *Report and Order*, including this IRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.[38] In addition, the Commission will send a copy of the *Further Notice*, including IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Further Notice* and IRFA (or summaries thereof) will also be published in the Federal Register.[39]

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[38] *See* 5 U.S.C. §801(a)(1)(A).

[39] *See* 5 U.S.C. §604(b).

Appendix D--Rule Changes

Part 76 of Title 47 of the Code of Federal Regulations is amended as follows:

Part 76 – Multichannel Video and Cable Television Service

1. The authority citation for Part 76 reads as follows:

AUTHORITY: 47 U.S.C. 151, 152, 153, 154, 301, 302, 303, 303a, 307, 308, 309, 312, 315, 317, 325, 336, 338, 339, 503, 521, 522, 531, 532, 533, 534, 535, 536, 537, 543, 544, 544a, 545, 548, 549, 552, 554, 556, 558, 560, 561, 571, 572, 573.

2. Section 76.5 is amended as follows:

(b) Television station; television broadcast station. Any television broadcast station operating on a channel regularly assigned to its community by § 73.606 or 73.622 of this chapter, and any television broadcast station licensed by a foreign government: Provided, however, That a television broadcast station licensed by a foreign government shall not be entitled to assert a claim to carriage, program exclusivity, or retransmission consent authorization pursuant to subpart D or F of this part, but may otherwise be carried if consistent with the rules on any service tier. Further provided that a television broadcast station operating on channels regularly assigned to its community by both Sections 73.606 and 73.622 of this chapter may assert a claim for carriage pursuant to subpart D of this part only for a channel assigned pursuant to 73.606.

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3. Section 76.56 is amended as follows:

(f) Carriage of additional broadcast television signals on such system shall be at the discretion of the cable operator, subject to the retransmission consent rules, § 76.64. A cable system may also carry any ancillary or other transmission contained in the broadcast television signal.

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4. Section 76.57 is amended as follows:

A new subsection (c) is added, as follows, and subsections (c), (d), (e) are renumbered (d), (e), and (f), respectively.

(c) With respect to digital signals of a television station carried in fulfillment of the must-carry obligations, a cable operator shall carry the information necessary to identify and tune to the broadcast television signal.

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5. Section 76.62 is amended as follows:

Subsection (b) is amended and a new subsection (g) is added, as follows:

(b) Each such television broadcast signal carried shall be carried without material degradation, and, for analog signals, in compliance with technical standards set forth in subpart K of this part.

* * *

(g) With respect to carriage of digital signals, operators are not required to carry ancillary or supplementary transmissions or non-program related video material.

*** *** *** *** ***

6. Section 76.64 is amended as follows:

§ 76.64 Retransmission consent.

* * *

(f) Commercial television stations are required to make elections between retransmission consent and must-carry status according to the following schedule:

* * *

(4)New television stations and stations that return their analog spectrum allocation and broadcast in digital only shall make their initial election any time between 60 days prior to commencing broadcast and 30 days after commencing broadcast or commencing broadcasting in digital only; such initial election shall take effect 90 days after it is made.

* * *

(k) Retransmission consent agreements between a broadcast station and a multichannel video programming distributor shall be in writing and shall specify the extent of the consent being granted, whether for the entire signal or any portion of the signal. This rule applies for either the analog or the digital signal of a television station.

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7. Section 76.922(f) is amended as follows:

§ 76.922(f) External Costs

New sub-section is added.

(vii) Headend equipment costs necessary for the carriage of digital broadcast signals.

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8. Section 76.922(j) is amended as follows:

§ 76.922 Rates for the basic service tier and cable programming services tiers.

(j) Network upgrade rate increase.

(1) Cable operators that undertake significant network upgrades requiring added capital investment may justify an increase in rates for regulated services by demonstrating that the capital investment will benefit subscribers, including providing television broadcast programming in a digital format.

*** *** *** *** *** ***

9. Section 76.964 is amended as follows:

§76.964 Written Notification of Changes in Rates and Services.

(a) In addition to the requirement of §76.309(c)(3)(i)(B) regarding advance notification to customers of any changes in rates, programming services or channel positions, cable systems shall give 30 days written notice to both subscribers and local franchising authorities before implementing and rate or service change. Such notice shall state the precise amount of any rate change and briefly explain in readily understandable fashion the cause of the rate change (e.g., inflation, change in external costs or the addition/deletion of channels). When the change involves the addition or deletion of channels, each channel added or deleted must be separately identified. For purposes of the carriage of digital broadcast signals, the operator need only identify for subscribers, the television signal added and not whether that signal may be multiplexed during certain dayparts.

STATEMENT OF COMMISSIONER SUSAN NESS
APPROVING IN PART AND DISSENTING IN PART

Re: ***Carriage of Digital Television Broadcast Signals, CS Docket Nos. 98-120, 00-96, 00-2***

After a long wait, we finally are addressing some of the issues involving the carriage of digital broadcast signals on cable. I would have hoped that this digital must carry proceeding would provide finality and clarity for industry participants who need sufficient lead-time to develop business plans. Unfortunately, it does not. While I support the majority of decisions in this Order, along with the Further Notice to establish a better record on the effect of a dual carriage requirement, I dissent to the tentative conclusion regarding dual carriage. I also write separately to emphasize the importance of our Further Notice regarding "program related" material in the digital context.

I. DUAL CARRIAGE

I support the Further Notice to collect additional information regarding cable operators' system capacity, the status of digital retransmission negotiations, and the practical effects of a dual carriage requirement. I dissent, however, from the Majority's "tentative conclusion" on a matter of law, which in effect states that industry has failed to meet its constitutional burden.[1]

First, drawing such a tentative conclusion is gratuitous. The item concedes that the record is insufficient to accurately discern the impact on cable operators' speech posed by a dual carriage requirement. Indeed, the Commission now asks for the very information -- including cable system channel capacity -- that I have been asking the Commission to collect for over two years. This information is significant especially in light of the upgrades being executed by the major MSOs, many pursuant to Social Contracts with this agency. Such system capacity information is solely at the disposal of cable operators. We also request important data on the status and scope of digital retransmission consent agreements. To what extent are cable operators voluntarily carrying digital broadcasts? The Majority should not form an opinion, even a tentative one, without first considering such fundamental data.

Second, the tentative conclusion addresses only one aspect of the intermediate scrutiny test. Specifically, the intermediate scrutiny standard established under *U.S. v. O'Brien,* as applied in the *Turner* decisions, requires that a content-neutral law affecting speech further a substantial or important government interest.[2] As the item points out, that interest in the must carry context boils down to (1) the preservation of free over-the-air television; (2) the promotion of the widespread dissemination of information from many sources; and (3) the promotion of fair competition.[3] Would a dual carriage requirement further that substantial government interest? The item is silent on this point. Such willingness to put the ball in industry's court while punting on the subject of our own legal burden is

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[1] Para. 3.

[2] Para. 114, *citing U.S. v. O'Brien*, 391 U.S. 367, 377 (1968).

[3] Para. 113, *citing Turner Broadcasting System, Inc. v. U.S.*, 512 U.S. 622, 662 (1997) (*Turner II*). It is important to note that the deference the Supreme Court afforded Congress in *Turner II* might not extend to this Agency. Therefore, we cannot be assured that, even if we assemble a voluminous record, the *Turner II* decision would sustain a dual carriage decision, especially given the relatively scant legislative history concerning digital broadcasting.

emblematic, I believe, of the Commission's need to develop a clearer, more visionary picture of its own role in the digital transition, regardless of what we ultimately decide on the question of dual carriage.

The government has a substantial interest in facilitating a successful digital transition for the American public. As all communications media go digital, broadcasting must follow suit or find its place in the history books along with the Passenger Pigeon. A successful digital transition thus would ensure that the public has access to free, over-the-air broadcasting in the digital age and beyond. A successful digital transition also would serve the government's interest in promoting viewpoint diversity by providing a greater variety of independent programming sources.

Finally, there is no need to state a "tentative conclusion" at this time. The item states that the statute "neither compels dual carriage; nor prohibits it" and that "in order to weigh the constitutional questions inherent in a statutory construction that would permit dual carriage, we believe it is appropriate and necessary to more fully develop the record in this regard."[4] I agree. I therefore believe that it is unnecessary, and ill-timed, for the government to weigh in with a premature assessment of the constitutionality of dual carriage before we have collected and analyzed the evidence that would address this question. Moreover, such a determination might prejudice the outcome of any ongoing market-based carriage discussions. I also seriously question whether a federal court would entertain review of such a tentative conclusion, since it is not a final agency action. Accordingly, I would have issued the Further Notice without drawing a tentative conclusion on the issue of the burden to cable operators posed by a dual carriage requirement.

I caution parties not to view my dissent as addressing, pro or con, the merits of a dual carriage requirement. I have great sympathy for the many independent cable networks whose efforts to obtain carriage may be adversely affected by broadcast digital carriage. My preference, therefore, has been and will continue to be the fostering of market-based solutions. In that vein, over the past few years, I repeatedly have urged broadcasters and cable operators at gatherings I attend, both public and private, to negotiate in good faith on carriage of digital broadcasts during this transition period. I also have argued that as the carriage capacity of cable systems expands, with upgrades and the addition of digital capabilities, the burden of carrying broadcast programming diminishes accordingly.

II. PRIMARY VIDEO

I reluctantly conclude that the best reading of the statutory term, "primary video," refers to one programming stream. I believe that this interpretation is the most easily defensible, but it is by no means the only reasonable one.

A single-stream interpretation of "primary video" could have the odd result of requiring broadcasters and cable operators to continuously examine broadcasters' content to determine whether the signal is primary video, program related, or something else. For example, if a broadcaster in a tri-state area offers a main news program, and then breaks away to three video streams to cover local news in each state, would the entire news program be primary video, would the breakout streams be program related, or neither? A cable operator would have to draw these conclusions. In contrast, a definition of "primary video" that includes all free, non-subscription video programming streams would be easier to administer.

[4] Para. 113.

Ironically, a single stream interpretation of primary video results in cable operators using less, not more, spectrum for broadcast must-carry at the end of the digital transition than they do today. Each analog signal requires 6 MHz of spectrum on the cable system. By contrast, with digital compression, and if broadcasters offer multiple program streams, it is possible that the "primary video" will require 2 MHz or less of capacity, not six.

Of course, retransmission consent agreements might resolve these issues. For example, the cable operator might agree voluntarily to carry the entire free, over-the-air video programming signal. Absent a must-carry requirement, a broadcaster might be more willing to enter into retransmission consent arrangements to carry a portion of the digital signal in addition to the full analog signal during the transition period.

While I support the decision to limit the definition of primary video to one digital programming stream based on the current state of the record, I would entertain on reconsideration new or refined support for a statutory construction that justifies the carriage of multiplexed free video programming. Although the statute mandates that the primary video be carried, and expressly excludes mandatory carriage of ancillary and supplementary services, is there discretion under the statute for the Commission to find it in the public interest (and not unduly burdensome) for the cable operator to carry a station's multiplexed free video channels? While the statute does not preclude carriage of multiplexed programming streams, it is hard to find legislative support for a more expansive mandatory carriage requirement.

Finally, I am particularly concerned about public broadcasters. As reflected in the record, and cited briefly in the item,[5] public broadcasters have developed innovative digital strategies that rely heavily on multicasting. These include "a 24-hour children's programming channel; an educational channel devoted to instructional video and adult education; a channel focused on local legislative and public interest issues; and the award-winning national programming schedule distributed by PBS."[6] To what extent does our construction of the "primary video" term allow for such multicasting, especially given the apparently broader definition of "program related" for noncommercial, educational broadcasters?[7]

III. CONCLUSION

Given the complexity and importance of these issues, the Commission must proceed carefully and expeditiously. I intend to continue working with broadcasters, cable operators, content producers, and consumer electronics manufacturers, along with my colleagues on the Commission, to facilitate a transition to digital broadcasting that works for the American people.

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[5] Para. 112, n. 4.

[6] *Letter from the Association of America's Public Television Stations*, January 18, 2001.

[7] See Para. 112 (*citing* sections 614(b)(3)(A) and 615(g)(1) of the Act).

SEPARATE STATEMENT OF
COMMISSIONER MICHAEL K. POWELL

RE: IN THE MATTER OF CARRIAGE OF DIGITAL TELEVISION BROADCAST SIGNALS *(CS Docket No. 98-129); Amendments to Part 76 of the Commission's Rules; Implementation of the Satellite Home Viewer Improvement Act of 1999; Local Broadcast Signal Carriage Issues (CS Docket No. 00-96); Application of Network Non-Duplication, Syndicated Exclusivity and Sports Blackout Rules to Satellite Retransmission of Broadcast Signals (CS Docket No. 00-2)* FCC No. 01-22

I am pleased to support this item which I believe provides the clarity that the cable and broadcast sectors have been anxiously awaiting from the Commission. While this order does not put to rest all of the fundamental issues integral to the transition to a digital world, we have, I believe, eliminated some uncertainties in our posture. As such, the order enhances our development of policy as we go forward to decide the larger, more constitutionally complex issues.

I write separately, however, to address our decision on primary video and its effect on those broadcasters that plan to multicast, particularly public broadcasters. I believe our decision is compelled by the language of the statute, leaving us little choice but to interpret it faithfully. Regrettably, this may make it more difficult for digital broadcasters to obtain cable carriage, though I sincerely hope cable operators will negotiate fairly in an effort to accommodate creative broadcast offerings, particularly the good works of public broadcasters who have a unique public mission, and to help facilitate the transition to digital television. If the Commission's construction of this statute should negatively impact the development of digital television, recourse to Congress for redress may be warranted, given that the statute clearly did not contemplate must carry in a digital world.

In a related context, I question the interpretation of Section 615(g)(1) suggested in the FNPRM as to "program related" content of noncommercial educational programming that is required to be carried by cable operators. As have others, I struggled with an appropriate interpretation of the statute. Public broadcasters indicated in comments on the record their plans to multicast a range of programming streams delivering a variety of content for different audiences. Inasmuch as these programming streams represent separate, distinct and multiple transmissions, I am unable to defensibly conclude that they are entitled to must carry as "program related" content. To do so would not comport with what I derive to be the congressional directive: that a broadcaster must select only one programming stream as primary and a cable operator is required to provide mandatory carriage to only one such designated stream. This is a question of statutory interpretation, and I might accept a more flexible definition if it were a discretionary policy judgement.

Finally, I urge continued flexibility on the part of broadcasters and cable operators to bring these issues to a successful outcome. I am pleased that we can bring to closure in this item those matters that we truly suppose to be clear. We can all advance to the decisions we will be called to make another day.

Dissenting Statement of Commissioner Gloria Tristani

In the Matter of the Carriage of Digital Television Broadcast Signals and Related Matters

CS Docket Nos. 98-120; 00-96; 00-2.

The transition from analog television to digital television poses fundamental policy questions. Two issues are not open to question. First, Congress has determined the public interest obligations of broadcasters prevailing in the analog era will carry over to the digital era.[1] Second, this Commission must continue to ensure cable communications systems "are responsive to the needs and interest of the local community" and "are encouraged to provide the widest possible diversity of information sources and services to the public."[2] Yet the majority today disposes of the question of the meaning of "primary video" in the must-carry context without reference to these explicit statutory purposes. In fact, there is no mention of the public interest in this section of the Order at all. By prematurely deciding that Congress intended to foreclose even public non-commercial stations from using their digital spectrum to broadcast several channels of programming with mandatory carriage on local cable systems, the Commission harms every American.[3]

While I do not question the majority's authority to settle on some definition of the term "primary video," doing so without substantial discussion of other applicable sections of the Communications Act or related case-law determinations is untenable. As the Supreme Court noted in Turner Broadcasting System Inc., v. FCC, 520 U.S. 180, 189 (1994), must-carry provisions serve "three interrelated interests: (1) preserving the benefits of free, over-the-air local broadcast television, (2) promoting the widespread dissemination of information from a multiplicity of sources, and (3) promoting fair competition in the market for television programming." As a result, our deliberation should have explicitly considered these key concerns.

Moreover, the Communications Act subjects that portion of the broadcast signal that is not "primary video" but nonetheless is "program related" to the same must-carry requirements. Despite this requirement the majority determined to put off a decision on the meaning of the term "program related."[4] Leaving aside the wisdom of defining only one of two key terms, I fear today's attempt to state a bright-line definition of "primary video" while leaving the related definition of "program related" video open, will work more mischief than it avoids. As a result, this Commission may soon face a torrent of content-related disputes that we are ill-equipped to resolve.

[1] 47 U.S.C. §336(d)("Nothing in this section shall be construed as relieving a television broadcast station from its obligation to serve the public interest, convenience, and necessity.")

[2] 47 U.S.C. §521(2) and (4)

[3] Order at pgs. 24-28 (construing 47 U.S.C. §614(b)(3)(requiring cable operators to carry the "primary video" signal of a broadcast station.)

[4] Order at pg. 28

One final point bears mentioning. Despite the length of time this docket has been open, I believe we would have benefited from a more deliberative approach than rushing the Order out the door at the end of this administration. The affected parties and the staff did their best to present and consider the merits of these issues, but the press of business rendered the effort insufficient. I hope in any future proceedings that reflective deliberation rather than student-like cramming characterizes our processes. For the foregoing reasons, I respectfully dissent.