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

In the Matter of	)	
	)	
	)	
Second Periodic Review of the	)	MB Docket No. 03-15
Commission's Rules and Policies	)	
Affecting the Conversion	)	RM 9832
To Digital Television	)	
	)	
Public Interest Obligations of TV	)	MM Docket No. 99-360
Broadcast Licensees	)	
	)	
Children's Television Obligations of	)	MM Docket No. 00-167
Digital Television Broadcasters	)	
	)	
Standardized and Enhanced Disclosure	)	MM Docket No. 00-168
Requirements for Television Broadcast Licensee	)	
Public Interest Obligations	)	

NOTICE OF PROPOSED RULE MAKING

Adopted: January 15, 2003 **Released: January 27, 2003**

Comment date: April 14, 2003
Reply Comment date: May 14, 2003

By the Commission: Commissioners Copps and Adelstein issuing separate statements.

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I. INTRODUCTION

1. With this *Notice of Proposed Rule Making*, we commence our second periodic review of the progress of the conversion of the nation's television broadcast system from analog technology to digital television ("DTV"). In the Commission's DTV proceeding (MM Docket No. 87-268), we stated our intention to hold periodic reviews of the progress of the digital conversion and to make any adjustments necessary to our rules and policies to "ensure that the introduction of digital television and the recovery of spectrum at the end of the transition fully serves the public interest."[1] In our first DTV periodic review, begun in March 2000, we addressed a number of issues important to the transition.[2] In this second periodic review, we revisit, as we indicated we would, several issues addressed in the first periodic review, and also seek comment on a number of additional issues that we consider essential to resolve in order to

[1] *Fifth Report and Order* in MM Docket No. 87-268, 12 FCC Rcd 12809, 12856 (1997)("*Fifth Report and Order*"), *on recon.*, *Memorandum Opinion and Order on Reconsideration of the Fifth Report and Order,* 13 FCC Rcd 6860, *on further recon*., *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, 14 FCC Rcd 1348 (1998), *recon. dismissed*, DA 99-1361 (rel. July 12, 1999), *recon. dismissed*, FCC 00-59 (rel. Feb. 23, 2000).

[2] *In the Matter of Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, 16 FCC Rcd 5946 (2001) ("*First DTV Periodic Review Report and Order*"), *on recon*., *Memorandum Opinion and Order on Reconsideration*, 16 FCC Rcd 20594 (2001) ("*First DTV Periodic Review MO&O*"), *Second Report and Order and Second Memorandum Opinion and Order*, 17 FCC Rcd 15978 (2002) ("*First DTV Periodic Review Second Report and Order*") (addressing DTV receiver standards and labeling requirements), *Third Memorandum Opinion and Order on Reconsideration*, 17 FCC Rcd 18571 (2002) (denying a Petition for Reconsideration of the determination in the *MO&O* that DTV area expansion applications must protect certain earlier-filed NTSC applications).

ensure continued progress on the digital transition.

II. BACKGROUND

2. In January 2001, we released the *First DTV Periodic Review R&O* in which we made a number of determinations to further the transition. Among other things, we established a December 31, 2003, deadline by which commercial television stations that have both their NTSC and DTV operations on in-core channels must elect which of their two core channels to use for DTV operations after the transition.[3] We gave non-commercial stations that have both their NTSC and DTV operations on in-core channels until the end of 2004 to elect their post-transition DTV channel. In addition, to provide broadcasters with an incentive to provide full replication of NTSC coverage with DTV service, we determined that, after December 31, 2004, any portion of a commercial broadcaster's NTSC Grade B contour that is not replicated by its digital television signal will not be protected in the DTV Table of Allotments. Noncommercial DTV licensees were given until December 31, 2005, in which to replicate or lose such DTV interference protection. We also imposed a principal community coverage requirement that is stronger than the DTV service contour requirement adopted as an initial obligation in the *Fifth Report and Order*. This new principal community coverage requirement, which becomes effective December 31, 2004, for commercial stations and December 31, 2005, for noncommercial stations, was intended to improve the availability of service in the community of license and to prevent undue migration of stations from their communities of license.

3. In the *First DTV Periodic Review MO&O*, we revised a number of the determinations made in the *Report and Order*. We noted that the results of a survey of all full-power commercial TV stations, conducted by National Association of Broadcasters ("NAB") in August 2001, indicated that nearly one-third of all stations responding to the survey anticipated that they would not be able to provide a digital signal by the May 2002 digital television construction deadline. Some smaller market broadcasters asserted that they were unable to obtain financing to construct DTV facilities sufficient to replicate their analog service area, and that they would not have sufficient operational experience by December 2004 to determine which core channel is superior for DTV transmission. In light of this, we concluded that the channel election and replication protection deadlines established in the *First DTV Periodic Review Report and Order* may have had the unintended consequence of hindering, rather than furthering, the DTV transition. We noted that broadcasters that were not capable of constructing full replication facilities by the interference protection deadline established in the *Report and Order* may have been postponing construction altogether, thus slowing transition progress.

4. To address these concerns, we decided in the *First DTV Periodic Review MO&O* to allow stations to construct initial DTV facilities designed to serve at least their communities of license, while still retaining for the time being DTV interference protection to provide full replication at a later date. We also determined that we would continue to provide DTV interference protection to the maximized service area

[3] In the DTV *Sixth Memorandum Opinion and Order,* we determined that after the transition DTV service would be limited to a "core spectrum" consisting of current television channels 2 through 51. *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd 7418 (1998). In order to reclaim and re-license the spectrum outside the core (TV channels 52 through 69) in accordance with statutory mandate, the Commission will relocate television operations in this spectrum to the core spectrum, and has reallocated the 698-806 MHz band to other services. *See Reallocation of Television Channels 60-69, the 746-806 MHz Band*, 12 FCC Rcd 22953 (1998); *In the Matter of Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, 17 FCC Rcd 1022 (2002).

specified in outstanding DTV construction permits for facilities in excess of those specified in the DTV Table of Allotments.[4] We temporarily deferred the replication protection and channel election deadlines established in the *First DTV Periodic Review Report and Order*. We stated, however, that in the next DTV periodic review we would establish a firm date by which broadcasters must either replicate their NTSC service areas or lose DTV service protection of the unreplicated areas, and by which broadcasters with authorizations for maximized digital facilities must either provide service to the coverage area specified in their maximization authorizations or lose DTV service protection to the uncovered portions of those areas. We also stated that we would establish a deadline by which broadcasters with two in-core allotments must elect which channel they will use at the end of the transition. We stated that these replication, maximization, and channel election deadlines may be earlier than, but will in no event be later than, the latest of either the end of 2006 or the date by which 85% of the television households in a licensee's market are capable of receiving the signals of digital broadcast stations.[5]

5. We indicated in the *First DTV Periodic Review MO&O* that the revisions we made to our rules and policies would prioritize those elements most important to further progress in the DTV transition. We stated that our primary goal should be to expand the number of DTV stations on the air and to provide service to consumers who live in heavily-populated areas – *i.e.*, within the community of license. By temporarily deferring our channel election, replication, and maximization requirements, we allowed stations to go on the air with lower-powered, and therefore less expensive facilities, and provided broadcasters additional time to gain experience with digital operation before being required to select their post-transition channel. The reduced build-out requirements adopted in the *First DTV Periodic Review MO&O* allowed broadcasters to save both on construction and operating costs, including lower power expenses. In addition, we allowed DTV stations subject to the May 1, 2002, or May 1, 2003, construction deadlines to operate initially at a reduced schedule by providing, at a minimum, a digital signal during prime time hours, consistent with their simulcast obligations.[6]

6. By permitting stations to elect a more graduated approach to providing DTV service, we allowed stations to focus their energies initially on providing digital service to their core communities, while allowing stations to increase operating hours and expand their coverage area as the transition progresses. Once broadcast stations have commenced at least the minimum permissible level of service to their communities, DTV set penetration levels should increase and marketplace forces should work to

[4] Television broadcast licensees may seek to expand or shift (also referred to as "maximize") their DTV allotments by filing applications to increase power or change the site or height of their antenna in such a way that it increases their DTV service area in one or more directions beyond the area resulting from the station's DTV allotment parameters.

[5] We did not alter our decision to require stations to provide a stronger signal to their communities of license than that adopted as an initial requirement in the *Fifth Report and Order*. This principal community coverage requirement will become effective December 31, 2004, for commercial stations and December 31, 2005, for noncommercial stations.

[6] *See* 47 C.F.R. § 73.624(b). Commencing April 1, 2003, DTV licensees and permittees are required to simulcast 50% of the video programming of the analog channel on the DTV channel. This requirement steps up to a 75% simulcast requirement in April 2004, and a 100% requirement in April 2005. 47 C.F.R. § 73.624(f). To the extent a station's simulcast obligations exceed the minimum digital video programming requirement in Section 73.624 of our rules, the simulcast obligation governs. Stations that were subject to the earlier construction deadlines (top four network affiliates in the top thirty markets) remained subject to the previous rule – *i.e.*, they must operate their DTV station at any time that the analog station is operating.

speed the transition and provide an incentive to broadcasters to provide service to outlying areas. We stated in the *First DTV Periodic Review MO&O* our expectation that, for many broadcasters, the financial obstacles they face in completing construction of their digital facilities by the applicable construction deadline would be alleviated by the reduced build-out requirements established in the item. For broadcasters unable to complete even the minimum permitted facilities by the applicable deadline, however, we revised our rules to permit applicants to seek an extension of time to construct a digital television station where the applicant can demonstrate financial hardship.[7]

III. PROGRESS REPORT

7. Pursuant to the construction schedule set forth in the DTV *Fifth Report and Order* and in Section 73.624(d) of the Commission's rules, affiliates of the top four networks in the top ten television markets were required to complete construction of their digital facilities by May 1, 1999; top four network affiliates in markets 11-30 by November 1, 1999; all remaining commercial television stations by May 1, 2002; and all noncommercial television stations by May 1, 2003.[8]

8. As of January 7, 2003, a total of 1,567 television stations in all markets (representing approximately 93% of all stations) have been granted a DTV construction permit or license.[9] There are a total of 807 stations now on the air broadcasting a digital signal, 359 with licensed facilities or program test authority and 448 operating pursuant to special temporary authority ("STA") or experimental DTV authority. Most Americans now have available to them an over-the-air signal from at least one digital television station, and many Americans have several DTV signals available to them.

9. In the top thirty television markets, 113 of the 119 network-affiliated television stations are on the air in digital, 105 with licensed DTV facilities or program test authority and 8 with STAs. In markets 1-10, of the 40 network affiliates due to be on the air by May 1, 1999, 38 are on the air with a digital signal. The remaining two were licensed and on the air prior to September 11, 2001, but are now off the air due to the attack on the World Trade Center.[10] One top ten market network affiliate is operating pursuant to an STA and has been granted additional time to construct its DTV facilities.[11] In markets 11-

[7] To qualify for an extension of time to construct a digital television facility under the financial hardship standard, the applicant must demonstrate that the cost of meeting the minimum build-out requirements exceeds the station's financial resources. The applicant must provide an itemized estimate of the costs of construction and a detailed explanation of why its financial condition precludes such an expenditure.

[8] *Fifth Report and Order*, 12 FCC Rcd 12809, 12840-41, ¶ 76; 47 C.F.R. § 73.624(d).

[9] The remaining 7% of stations have applications on file with the Commission that are awaiting Mexican, Canadian, or other clearances; are mutually exclusive; or have rulemaking proceedings pending with the Commission.

[10] Two network-affiliated television stations in New York City (WABC-DT and WNBC-DT), as well as three other DTV stations (WWOR-DT, WPIX-DT, and WNET-DT) in that market were taken off the air as a result of the September 11, 2001, attack and have not yet rebuilt their DTV facilities. Except for WWOR-DT, these stations are not broadcasting a digital signal. WWOR-DT is broadcasting in digital from an antenna shared with WNYW-DT on the Empire State Building.

[11] The Commission has granted WBBM-DT, Chicago, Illinois an extension of time to complete construction of their digital facilities. *See Requests for Extension of the October 5, 2001, Digital Television Construction Deadline*, MM Docket No. 02-113, FCC 02-150, ¶ 21 (rel. May 24, 2002) ("*DTV Extension Order and NPRM*"). WBBM-DT currently is airing a digital signal pursuant to an STA from a temporary antenna as part of its effort to resolve interference caused by its DTV station to local cable television service.

30, 68 of 79 network affiliate stations required to be on the air by November 1, 1999, have constructed their licensed DTV facilities. Seventy-five of these stations now are on the air. Seven stations have been granted additional time to complete construction of their digital facilities.[12]

10. Approximately 1,196 commercial television stations were due to commence digital broadcasts by May 1, 2002. As of January 7, 2003, 610 of these stations are broadcasting a digital signal. In addition, 84 noncommercial educational television stations are voluntarily airing digital broadcasts ahead of schedule. The remaining 289 noncommercial educational television stations are scheduled to commence digital operations by May 1, 2003.

11. A total of 843 commercial television stations subject to the May 1, 2002, deadline requested an initial extension of time to complete construction. The Media Bureau granted 772 of these initial extension requests upon showings that the delay in completing construction was due to financial hardship or to circumstances that were either unforeseeable or beyond the permittee's control. The DTV construction permits for these stations were extended for a six-month period, until November 1, 2002. As of January 7, 2003, 602 of these stations have requested an additional extension of time to construct, and 267 of these requests have been granted. The remainder of these extension requests have either been dismissed or remain pending. Most stations state that DTV service will be operational during the next six month extension period.

12. Seventy-one stations that requested an extension of the May 1, 2002 construction deadline were found not to have taken all reasonable steps to complete construction of their DTV facilities in an expeditious manner. Accordingly, the Media Bureau denied these extension applications by letter rulings and admonished each permittee for its failure to comply with its DTV construction obligations. Each permittee was given until December 1, 2002 to come into compliance with the DTV construction rule and was directed to submit, within 30 days, an initial report outlining the steps it intended to take to complete construction. These permittees also were required to file a subsequent progress report with the Commission.[13] As of January 7, 2003, 54 of these stations have commenced DTV operation.

13. In the *DTV Extension Order and NPRM*, we sought comment on a proposed set of graduated sanctions for television licensees that fail to meet the applicable DTV construction deadlines.[14] The proposed sanctions range from admonishment and additional reporting obligations, to fines, to removal of the station's DTV authorization. The Commission tentatively concluded that a licensee whose DTV authorization is rescinded will not be permitted to convert to digital on its analog allotment without being subject to competing applications.

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[12] In the *DTV Extension Order and NPRM*, we granted the following stations in markets 11-30 additional time to complete construction of their DTV facilities: WVIT-DT, New Britain, Connecticut; WTIC-DT and WFSB-DT, Hartford, Connecticut; WTVJ-DT, Miami, Florida; and KUSA-DT, KMGH-DT, and KCNC-DT, Denver, Colorado. The Connecticut stations reported delays in obtaining zoning approval and noted that ongoing FCC channel swap rulemakings affect their digital stations; WTVJ-DT in Miami also is involved in a pending rulemaking which would result in the change of its DTV allotment; the Denver stations report that they have been unable to complete construction of their DTV facilities on Lookout Mountain, outside of Denver, due to an ongoing unresolved local tower siting dispute.

[13] *See*, *e.g.*, Letter from W. Kenneth Ferree, Chief, Media Bureau to KSBI Licensee, L.P. (June 3, 2002), File No. BEPCDT-20020301AHU; Letter from W. Kenneth Ferree to Trinity Broadcasting Network, (June 3, 2002), File No. BEPCDT-20020304AGK. Copies of these letters are available at www.fcc.gov/mb/video/files/dendtvextreq.pdf.

[14] *DTV Extension Order and NPRM*, MM Docket No. 02-113, ¶ ¶ 17-20.

14. In addition to broadcast licensees, other market participants, including cable and satellite companies, cable and broadcast networks, and consumer equipment manufacturers and retailers, play a critical role in influencing the pace of the digital transition. During the past year the amount of broadcast and other HDTV service offered by MVPDs has increased. Several cable MSOs including Cox, Comcast, Time Warner, and Charter now offer broadcast stations in HDTV on cable systems in selected markets.[15] Both major DBS providers also offer HDTV programming. DIRECTV offers HBO HD and Showtime HDTV to subscribers receiving premium channels and HDNet to all subscribers at no extra charge.[16] EchoStar, on its Dish Network, offers the CBS east and west coast feeds in HD to qualified subscribers, HBO HD and Showtime East to premium channel subscribers, and Discovery HD Theater to subscribers for an additional fee.[17]

15. In April 2002, FCC Chairman Michael Powell urged several industries to take specific steps to move the DTV transition forward. Specifically, he called for the provision of more high definition television ("HDTV") or other "value-added DTV programming," more cable carriage of DTV channels, the provision of cable set-top boxes that allow for the display of HDTV programming, and the inclusion of over-the-air DTV tuners in almost all new television receivers by the end of 2006.[18] Many of the industries have responded favorably to the Chairman's plan and have made tangible commitments to advance the transition.[19] For example, NCTA has stated that cable operators have committed, by January 1, 2003, to offer to carry the signal of up to five digital commercial or public television stations (at no cost to cable operators or broadcasters) and/or cable networks that provide HDTV during at least 50% of their prime time schedule or a substantial portion of their broadcast week.[20]

16. On August 8, 2002, we adopted a *Second Report and Order and Second Memorandum Opinion and Order* in the first DTV periodic review proceeding, which requires that all TV receivers manufactured in the U.S. with screen sizes greater than 13 inches and all TV receiving equipment, such as VCRs and DTV recorders, be capable of receiving DTV signals over-the-air no later than July 1, 2007.[21] In addition, on August 8, 2002, we adopted a *Notice of Proposed Rule Making* to explore whether we could and should mandate use of the "broadcast-flag" copy-protection mechanism for DTV to protect

[15] Comments of NCTA filed in MB Docket No. 02-145, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming (NCTA Comments), at 33-35. This is in addition to HBO HD and Showtime HDTV. At least one MSO, Cox, offers Discovery Channel's new Discovery HD Theater as a premium offering.

[16] http://www.directv.com/DTVAPP/imagine/HDTV.jsp.

[17] http://faq.dishnetwork.com/questions/106.asp?sc=%2F&cboSubCategory=50&cboCategory=10&txtSearch=&pg=1. EchoStar also offers DISH-On-Demand Pay Per View in HDTV format as well as the HDTV Demo Channel.

[18] *See* Letters from Chairman Michael K. Powell to Senator Ernest F. Hollings and Representative W. J. "Billy" Tauzin, (Apr. 4, 2002), at www.fcc.gov/dtv.

[19] *See* July 11, 2002 Statement by Chairman Michael K. Powell, available at www.fcc.gov/dtv. Copies of letters from participating industries, detailing the initiatives they plan to take in response to the Chairman's plan, are available at www.fcc.gov/dtv/industryletters.pdf.

[20] Letter from Robert Sachs, President NCTA, to Chairman Michael K. Powell (May 1, 2002). *See also*, NCTA Comments. This commitment includes the ten largest cable operators including AT&T Broadband, AOL-Time Warner, Comcast, Charter, Cox, Adelphia, Cablevision, Mediacom, Insight and CableOne.

[21] *First DTV Periodic Review Second Report and Order,* FCC 02-230, ¶ 40. Larger sets have earlier deadlines.

digital broadcast content from unauthorized copying and redistribution.[22]

17. Finally, in a *Further Notice of Proposed Rule Making*,[23] released January 10, 2003, the Commission sought comment on proposed rules for "plug and play" cable compatibility that will allow consumers to plug their cable directly into their digital TV set without the need for a set-top box. The *FNPRM* seeks comment on a Memorandum of Understanding ("MOU") filed with the Commission by the cable and consumer electronics industries detailing an agreement on a cable compatibility standard for an integrated, one-way digital cable television receiver, as well as other unidirectional digital cable products.[24]

IV. ISSUE ANALYSIS

A. Transition Progress in Specific Areas

18. Our goal in this proceeding is to address impediments that must be resolved to ensure a complete and rapid transition to digital television. To that end, we invite commenters to provide us with information about problems that may be slowing transition progress. What factors currently present the greatest obstacles to the transition? What steps should the Commission take to address these obstacles?

19. With respect to the progress of the digital buildout, we invite comment on the extent to which broadcasters continue to face difficulties in building their DTV stations. To what extent are unresolved zoning or tower siting issues continuing to delay the digital buildout? Are stations continuing to face difficulties in obtaining construction financing? To what extent is our decision to allow stations to commence digital operations with minimum digital facilities and reduced operating hours alleviating financial obstacles to construction? What other obstacles are broadcasters facing?

20. We also invite comment on the progress made by cable and satellite operators in constructing facilities and deploying the equipment necessary to carry digital television programming, including HDTV. To what extent are cable operators and satellite carriers currently carrying, or planning to carry, digital television broadcast signals? If these digital signals are in HDTV format, are they being passed through in HDTV, or are they being converted to another digital format, or to analog? To what extent are cable operators and satellite carriers providing HDTV programming from a source other than broadcast television? How many cable and satellite subscribers have the equipment necessary to receive such signals in digital format, including HDTV?

21. In addition, we seek information about the production and distribution of digital programming. What kind of programming is being produced to take advantage of the capabilities of DTV? To what extent are content distributors, including broadcast television licensees as well as cable and satellite operators, offering programming filmed in standard or high definition digital as opposed to programming that has been converted from analog to digital? We request information on the extent to which broadcasters are now using or planning to use digital channels for multichannel program offerings

[22] *Notice of Proposed Rule Making*, MB Docket 02-230, FCC 02-231 (rel. Aug. 9, 2002).

[23] Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment**,** Further Notice of Proposed Rulemaking, CS Docket No. 97-80 and PP Docket No. 00-67, FCC 03-3 (rel. Jan. 10, 2003).

[24] Receivers manufactured pursuant to the MOU would still need an external navigation device to receive certain advanced features, such as certain electronic programming guides and video on demand.

("multicasting") or for other services.

22. We are also interested in information about the general availability of DTV consumer equipment. We invite commenters to provide us with up-to-date information about the pace of DTV receiver sales and the price of such units. Is consumer demand for digital equipment increasing? What efforts are being made to promote digital or high definition television, including on-air promotion? We also request information on the number of devices sold to consumers that can receive and display digital signals broadcast over the air. How many of these devices downconvert the digital signal to analog and how many receive and display the signal in high or standard definition digital? How many TV receivers can receive and display digital programming when directly connected to a cable system or satellite service, and how many require an additional set-top box? How many such devices sold to consumers are so-called "DTV ready" sets without over the air tuners?

23. Congress recently enacted legislation modifying the statutory deadlines for auction of spectrum previously allocated to television broadcasting.[25] As part of this legislation, Congress required that the Commission submit a report to Congress within one year describing, *inter alia*, progress made in the digital television transition.[26] We intend to use information collected in this proceeding in preparing this report. Consequently, in addition to the information described above, we invite commenters to provide us with any additional data or views regarding progress made in the DTV transition to be considered in this report.

B. Channel Election

24. In the DTV *Sixth Memorandum Opinion and Order*,[27] we determined that, after the transition, DTV service would be limited to a "core spectrum" consisting of current television channels 2 through 51 (54-698 MHz). Although some stations received transition channels out of the core, and a few have both their NTSC and DTV channels outside the core, we believe that there will be sufficient spectrum to accommodate all DTV stations within the core by the end of the transition. Having stations with two in-core channels decide which one of the channels would be most suitable for use in digital broadcasting will assist us in determining what channels will be available for stations with two out-of-core channels and in clearing the out-of-core spectrum.

25. In the *First DTV Periodic Review MO&O*, we temporarily deferred channel election deadlines until this next periodic review. Accordingly, we now request comment on the new channel election deadline. Our goal is to establish a deadline that gives broadcasters with two in-core channels enough time to make an informed decision about which of their two core channels would be most suitable

[25] *See* Auction Reform Act of 2002, Pub. L. No. 107-195 (2002). This legislation eliminated the existing statutory deadlines in 47 U.S.C. § 309(j)(14)(C) for the auction of most of the spectrum in the 700 MHz band, and established a new deadline of August 2002 for commencement of the auction of the Lower 700 MHz Band C and D block licenses. The initial auction for these spectrum blocks has been completed.

[26] *Id.*, Sec. 3 (to be codified at 47 U.S.C. § 309(j)(15)(C)(iv)). This report must also specify when the Commission intends to reschedule auctions 31 and 44 (other than the Lower 700 MHz Band C and D blocks for which the auction commenced August 27, 2002) and the progress made "in the assignment and allocation of additional spectrum for advanced mobile communications services that warrants the scheduling of such auctions." *Id.* As issues relating to the timing of auctions and the allocation of spectrum for advanced mobile communications services are beyond the scope of this proceeding, they will be addressed separately.

[27] *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd 7418 (1998).

to use for digital broadcasting. We continue to believe that stations that choose to begin service at lower power should be given an opportunity to increase power and to test for interference or other service problems at those higher power levels before they are required to decide which of their two channels is preferable for DTV operations. At the same time, we recognize that stations with two out-of-core assignments must have time to plan their moves to in-core channels before the end of the transition. To accommodate these concerns, we propose that commercial and noncommercial broadcast licensees with two in-core assigned channels make their final channel election by May 1, 2005. This date provides three years for commercial broadcasters and two years for noncommercial broadcasters after the applicable digital construction deadline to make the channel election. A May 1, 2005, channel election deadline also provides licensees that will have to move into the core time to plan for their move before December 31, 2006. We seek comment on this proposal.

26. As an alternative, we seek comment on whether establishing the same deadline(s) for channel election as for replication and maximization protection, as discussed below, would be more effective in speeding the transition. As our proposed replication and maximization protection deadlines are later than May 1, 2005, aligning the channel election deadline with these deadlines would give broadcasters more time to increase to full power before they determine which channel is preferable for digital broadcasting. Better operating data may be available when broadcasters are operating at or close to their full operating power near the replication and maximization protection deadlines. We seek comment on whether we should align the channel election deadline(s) with the replication and maximization protection deadlines we establish herein and, if so, what the deadline(s) should be.[28]

27. As we stated in the *First DTV Periodic Review Report and Order*, in all cases, including stations with both channels in-core, we reserve the right to select the final channel of operation in order to minimize interference and maximize the efficiency of broadcast allotments in the public interest.[29] We intend to review the channel elected to ensure that its use furthers these goals.

DTV/Analog In-Core Channel Swaps

28. Some stations with two in-core channels have already determined that they prefer to use their current analog NTSC channel for DTV operations and want to commence digital operations on the new channel before the end of the transition. Currently a station with in-core DTV and NTSC channels can swap those channels only through a dual rulemaking proceeding to change both the DTV and NTSC Tables of Allotments. As the DTV transition proceeds, it is possible that many stations will want to explore this swap option. Accordingly, we seek comment on whether we should allow such channel swaps through an application process.[30] We propose to require that parties meet the spacing requirements for amending the analog Table of Allotments pursuant to 47 C.F.R. § 73.610 and to allow parties to use Longley-Rice analysis to demonstrate that an analog TV station protects DTV stations and for amending the DTV Table of Allotments pursuant to 47 C.F.R. § 73.623. We invite comment on these proposals and on how the Commission should address any loss of analog service or cable carriage or other public interest issues that may arise in connection with analog/DTV channel swap proposals.

[28] We discuss replication and maximization interference protection for in-core channels in section IV(C), *infra.*

[29] *First DTV Periodic Review Report and Order*, 16 FCC Rcd at 5953, ¶16.

[30] Currently, two or more DTV licensees/permittees are allowed to request a swap of their DTV channel allotments by filing modification applications for each station.

C. Replication and Maximization for In-Core Channels

29. In the *First DTV Periodic Review MO&O* we stated that we would establish in this second DTV periodic review a date by which broadcasters must either replicate their NTSC service areas or lose DTV service protection to the unreplicated areas, and by which broadcasters with authorizations for maximized digital facilities must either provide service to the associated coverage area or lose DTV service protection to the uncovered portions of those areas. We stated that these replication and maximization protection deadlines may be earlier than, but will in no event be later than, the latest of either the end of 2006 or the date by which 85% of the television households in a licensee's market are capable of receiving the signals of digital broadcast stations.[31] We now seek comment on establishing new dates for maintaining interference protection for the unserved portions of both the replication and maximization service areas of DTV stations on channels 2-51.[32]

30. Each DTV channel allotment was chosen to allow its DTV service to best match the Grade B service contour of the NTSC station with which it was paired.[33] We took this approach to "ensure that broadcasters have the ability to reach the audiences that they now serve and that viewers have access to the stations that they can now receive over the air."[34] Although we have declined to make full signal replication mandatory,[35] we continue to believe that most DTV broadcasters eventually will replicate their NTSC service areas with DTV service. Our goal in temporarily deferring the replication protection deadline established in the *First DTV Periodic Review Report and Order* was to permit stations to elect a more gradual build out of their DTV facilities, and thereby increase the number of stations capable of commencing digital service to at least their core communities by the May 2002 and May 2003 construction deadlines. Once stations commence at least the minimum level of digital service, we believe that DTV set penetration levels will increase, thereby driving demand for digital programming and providing broadcasters with an incentive to expand digital service.

31. We have also emphasized DTV service maximization in the digital transition as a means by which stations may increase their DTV signal coverage and provide DTV service competitively within their respective markets.[36] Maximization is particularly important for UHF stations. Most analog VHF stations were allocated UHF digital facilities with power levels generally sufficient to permit replication of the station's analog VHF coverage. Analog UHF stations were allocated significantly less power for their UHF digital facilities. These lower power levels were selected to permit replication of the analog coverage area of the UHF facilities, which is significantly smaller in most cases than the analog coverage area of VHF facilities. In the *First DTV Periodic Review MO&O*, we gave DTV licensees seeking to maximize facilities, including analog UHF licensees, the same flexibility to implement graduated construction plans

[31] *See First DTV Periodic Review MO&O*, 16 FCC Rcd at 20598, ¶ 10.

[32] We seek comment on replication and maximization interference protection deadlines for stations operating on TV channels 52-69 (698-806 MHz) in section (IV)(D), *infra*.

[33] *Sixth Report and Order*, 12 FCC Rcd 14588, 14605 (1997) ("*Sixth Report and Order*"), *on recon.*, *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, *supra, on further reconsideration, Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders,* 14 FCC Rcd 1348 (1998), *recon. dismissed*, DA 99-1361 (rel. July 12, 1999), *recon. dismissed* FCC 00-59, (rel. Feb. 23, 2000).

[34] *Id*.

[35] *See First DTV Periodic Review Report and Order*, 16 FCC Rcd at 5955, ¶ 21.

[36] *Sixth Report and Order*, 12 FCC Rcd at 14605, ¶ 30.

as analog VHF licensees.[37]

32. Our goal in this second periodic review is to set replication and maximization deadlines that allow stations sufficient time to provide full replication and maximization service while also ensuring that stations continue to progress toward an all-digital broadcast service. We seek comment below on proposed new deadlines by which we would cease interference protection to the unserved areas within a station's DTV allotment or maximization authorization. We also seek comment on the disposition of construction permits or applications for replication or maximization pending at the time of the deadline.

33. For DTV channels within the core spectrum, we propose to set new replication and maximization protection dates close to the end of the transition: for the top-four network affiliates (*i.e.,* ABC, CBS, Fox and NBC) in markets 1-100 - July 1, 2005; and for all other commercial DTV licensees as well as noncommercial DTV licensees - July 1, 2006.

34. Establishing specific dates for lifting interference protection will ensure that broadcasters either use their replication or maximization facilities by that date or risk losing the unused portion of the associated area, thereby prompting broadcasters to expand their digital service area and speeding the transition. Setting firm deadlines will also help promote transition progress because other important participants in the transition, such as electronics manufacturers, content providers, advertisers, and MVPDs, will be able to anticipate a date by which most broadcasters will be operating at full power, and adjust their business plans accordingly. The deadlines we propose would give the largest commercial stations in the largest markets on in-core channels at least three years to acquire necessary financing, develop business plans, and expand their digital service areas. Smaller-market commercial stations, smaller commercial stations in larger markets, and noncommercial DTV licensees, which may face greater obstacles in moving towards full replication or service maximization, would have close to the maximum time under the current statutory transition period to complete their replication and maximization facilities. Establishing earlier interference protection deadlines for larger stations in larger markets is consistent with previous decisions to require larger stations in larger markets to lead the transition.[38] We seek comment generally on the appropriateness of these dates. We also invite commenters to propose alternative approaches for establishing interference protection deadlines, such as giving stations a certain amount of time (*e.g*., 24 months) after the station commences digital service or after adoption of the Report and Order in this proceeding, whichever is later, to fully replicate or maximize, or establishing a replication/maximization deadline for each market based on when that market reaches a specified digital service penetration level.

35. If a station fails to construct and operate facilities that fully replicate its NTSC service area or provide signal coverage over an authorized maximized service area by the interference protection deadline(s) we will establish in this proceeding, we seek comment on how the Commission should dispose of any construction permits or applications for replication or maximization facilities at that time. Should

[37] Congress also has recognized the importance of preserving the right of DTV stations to maximize and has established specific measures to protect coverage areas defined in maximization applications. In the Community Broadcasters Protection Act of 1999, Congress protected applications for maximization against new Class A stations. To be entitled to protection by low power television stations applying for primary Class A status, DTV stations were required to have filed an application for maximization or a notice of intent to seek maximization by December 31, 1999, and to have filed a bona fide application for maximization by May 1, 2000. 47 U.S.C. § 336(f)(1)(D), (7)(A)(ii)(IV).

[38] *Fifth Report and Order*, 12 FCC Rcd at 12842, ¶ 78; 12844, ¶ 86.

applications for facilities in excess of those in actual operation by the station be dismissed? How should the Commission treat authorizations for facilities not being fully used by the station? For example, a station has a construction permit for facilities that would serve a larger area than facilities it is operating pursuant to Special Temporary Authority. Should such a construction permit be modified to specify the facilities in actual operation? In addition, we invite comment on how the Commission should treat the spectrum use opportunity that would be created after the interference protection deadline(s). Who should be permitted to file an application for this spectrum? Should any applications for this spectrum be subject to competing applications? Our inclination is to restrict any station that has failed to fully replicate or construct its authorized maximization facilities by the applicable deadline from filing an application to expand coverage for a certain period of time in order to allow other existing or new stations, including Class A eligible LPTV stations on out-of-core channels, to apply to use this spectrum. If we were to adopt this approach, how long should the restriction on the filing of expansion applications by stations that did not fully replicate or maximize by the deadline last? Any decision we reach in this proceeding regarding future licensing of this spectrum will be consistent with 47 U.S.C. § 309(j).

36. Finally, we seek comment on whether we should adopt an intermediate signal coverage requirement beyond a broadcaster's current obligation to cover its community of license and in addition to the ultimate "use-or-lose" deadline for full replication or maximization. In the *First DTV Periodic Review MO&O*, the Commission predicted that the "requirement that broadcasters serve their community of license will ensure that, for most stations, the majority of their analog service populations will receive initial digital service."[39] We seek comment on whether this predictive judgment has been borne out in practice. For instance, we seek comment on whether some of the larger cities in which stations can operate under low-power STAs have large suburban populations that may not be served by a signal that only covers a station's community of license. If there are significant numbers of consumers not being served by stations operating under low-power STAs, we seek comment on what actions, if any, the Commission should take. Should the Commission establish a deadline by which time stations must provide DTV service within the entire area of their analog "city-grade" coverage contour[40] or their Grade A coverage? If so, when should such a requirement apply? Should such a requirement apply only to a subset of DTV stations (*e.g.*, larger stations in larger markets that may have significant populations in areas adjacent to their communities of license, such as the top-four network affiliates in the top 100 markets)? In the alternative, will the 7dB increase in community of license coverage that must be met by December 31, 2004 for commercial stations and December 31, 2005 for noncommercial stations ensure that the majority of viewers are served without an additional coverage requirement? If the purpose is to ensure that viewers are served, should the date for the increased power requirement be advanced? Yet another alternative would be to require broadcast stations to deploy transmission equipment that is capable of being upgraded to serve broader coverage areas (e.g., their analog Grade "B" coverage), but permit the stations themselves to determine when any intermediate power increases occur prior to the full replication "use-or-lose" date. In general, our goal is to ensure that the maximum number of consumers is able to receive digital television as quickly as possible while providing broadcasters a realistic timetable for increasing to full power.

[39] *First DTV Periodic Review MO&O*, 16 FCC Rcd at 20607, ¶ 25.

[40] This contour encompasses the analog service area predicted to receive a field strength equal to or exceeding the analog principal community coverage requirement. *See* 47 C.F.R. § 73.685. In many cases, this contour extends significantly beyond the boundaries of the community of license.

Band-Clearing Arrangements

37. In the *First DTV Periodic Review MO&O*, we temporarily deferred the deadline for loss of interference protection for unserved areas for broadcasters involved in a band-clearing arrangement that are left with a DTV single-channel allotment.[41] We stated that we will continue to protect throughout the course of the transition the analog TV service area of stations that do not have a paired DTV channel, either because they were not assigned a paired DTV channel or because they elect voluntarily to relinquish their paired DTV channel and convert to single channel analog operation as part of the 700 MHz band clearing, as long as the stations continue to operate in an analog mode.[42]

38. We stated that our intention was to provide broadcasters involved in band-clearing with the same treatment as other broadcasters in terms of our DTV replication policy. We also said that, in our next periodic review, we would establish a new replication protection deadline for these broadcasters within the same timeframe as that established for replication and maximization for other broadcasters. We hereby seek comment on the timeframe needed and appropriate for broadcasters involved in band-clearing proposals to replicate their service area once commencing digital operation.

D. Interference Protection of Analog and Digital Television Service in TV Channels 51-69

39. We seek comment on whether we should adopt the same or different replication and maximization interference protection deadlines for stations operating on TV channels 52-69 (698-806 MHz, also referred to as the "700 MHz band") as for stations operating on core channels. In order to reclaim and relicense channels 52-69 in accordance with statutory mandate, the Commission is relocating television operations in this spectrum to the core spectrum (TV channels 2-51), and has reallocated the 698-806 MHz band to other services. The Auction Reform Act of 2002 directs the Commission to conduct auctions of the 700 MHz band before the expiration of the Commission's auction authority under 47 U.S.C. § 309(j)(11) (September 30, 2007). During the transition to digital broadcasting, incumbent broadcasters are permitted to continue to operate in the 698-806 MHz band. Licensees of new public safety, commercial wireless, and other services are permitted to operate in the band prior to the end of the transition, provided they do not interfere with incumbent analog and digital broadcasters.

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[41] *First DTV Periodic Review MO&O*, 16 FCC Rcd 20610, ¶ 33. In an earlier decision, the Commission concluded that a broadcaster that has been reduced to single-channel operation as a consequence of a band-clearing arrangement may continue to operate in analog until December 31, 2005, with a presumption that a deadline extension is warranted if the broadcaster demonstrates that 70% of the television households in its market are not capable of receiving digital broadcast signals. *Order on Reconsideration of the Third Report and Order*, 16 FCC Rcd. 21633, 21638-39 (2001). We intend to use the same evidentiary standards in assessing whether the 70% penetration target has been met as we determine will be used when making similar determinations under the statutory standard in 309(j)(14)(B). *Id.* n. 40. *See supra s*ection IV (H). The Commission concluded in the *Order on Reconsideration of the Third Report and Order* that such broadcasters retain the interference protection associated with their single-channel DTV allotment for a period of 31 months after beginning to transmit in digital. *Order on Reconsideration of the Third Report and Order*, 16 FCC Rcd. 21644-45. This 31 month period was equal to the period of interference protection for unreplicated areas that the Commission provided to all broadcasters in the *First DTV Periodic Review Report and Order*. *Id.*

[42] *First DTV Periodic Review MO&O,* 16 FCC Rcd at 20606, ¶ 32. We stated that, generally, protection of these stations' analog TV operation within their authorized service areas will allow them to convert to digital operation providing DTV service to the same area.

40. To speed the clearing of the 698-806 MHz band for use by new services and to ensure continued progress in the digital transition, it may be appropriate to establish earlier replication and/or maximization protection deadline(s) for incumbent broadcasters in this spectrum than the deadline we establish for broadcasters operating on channels within the core. Accordingly, we invite comment on the extent to which the Commission should provide interference protection to the NTSC replication service area of DTV broadcasters in this band, and to the unserved areas specified in outstanding DTV maximization authorizations. We also invite comment on a number of other issues concerning the protection that must be provided to incumbent analog and digital broadcasters in the 698-806 MHz band during the transition.

1. Background

Upper 700 MHz Band (Channels 60-69)

41. In developing the initial DTV allotments, the Commission planned for the early recovery of channels 60-69 (746-806 MHz) in order to provide spectrum for use by other services, particularly public safety and land mobile services.[43] Given the relatively light use of this band for full service broadcasting and the proximity of existing land mobile communications systems to channels 60-69, the Commission concluded that equipment economies and enhanced interoperability between future public safety services and current systems operating in the 800 MHz band supported early recovery.[44] The DTV Table was developed to facilitate the early recovery of channels 60-69 ("Upper 700 MHz Band") by minimizing the use of these channels for DTV purposes.[45] Subsequently, the Balanced Budget Act of 1997 was enacted, which mandated that the Commission reallocate channels 60-69 to new public safety and commercial services by January 1998.[46]

42. Channels 60-69 were reallocated for wireless communications services in 1998.[47] As mandated by the 1997 Balanced Budget Act, the 24 megahertz of spectrum at 764-776 MHz and 794-806 MHz was allocated on a primary basis to the fixed and mobile services and designated for public safety use. Portions of channels 60, 62-64, and 67-69 are already licensed to guard band and public safety entities. The remaining 36 megahertz of spectrum was allocated on a primary basis to the fixed, mobile, and new broadcasting services for commercial use. Licenses in this 36 megahertz of spectrum will be assigned through competitive bidding.

43. In the *DTV Sixth Report and Order*,[48] we stated that all analog and DTV operations in the

[43] *Sixth Report and Order*, 12 FCC Rcd 14626, ¶ 79.

[44] *Reallocation and Service Rules for the 698-747 MHz Spectrum Band (Television Channels 52-59)*, 16 FCC Rcd 7278, 7283 ¶ 6 (2001) (*citing Reallocation of Television Channels 60-69, the 746-806 MHz Band*, 12 FCC Rcd 14141, 14142 (1997) ("*Upper 700 MHz Reallocation Notice*")). Today, there are 95 full service NTSC facilities licensed or with an approved construction permit on channels 60-69. In this band there are also 20 DTV allotments of which 16 DTV facilities are either licensed or have an authorized construction permit.

[45] *Sixth Report and Order*, 12 FCC Rcd at 14591, 14624 ¶¶ 4, 76.

[46] *See* Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 § 3004 (1997) ("1997 Balanced Budget Act") (adding new Section 337 of the Communications Act).

[47] *Reallocation of Television Channels 60-69, the 746-806 MHz Band*, 12 FCC Rcd 22953 (1998) ("*Reallocation Report and Order*").

[48] *See Sixth Report and Order*, 12 FCC Rcd at 14626, ¶ 80.

Upper 700 MHz Band (746-806 MHz) would be fully protected during the DTV transition. The Balanced Budget Act of 1997 requires that the Commission establish any technical restrictions necessary to protect analog and digital television service in the 746-806 MHz band during the transition.[49] In the *Reallocation Report and Order*, we reiterated our commitment to full interference protection for analog licensees, and indicated that incumbent analog TV and DTV operations in the band would be entitled to protection from new services during the DTV transition.[50] We addressed the protection of analog and DTV operations in the 764-776 MHz and 794-806 MHz public safety bands in the *Public Safety Spectrum Report and Order*,[51] which adopted service rules for public safety uses of this spectrum. We subsequently applied the same analog TV protection criteria adopted in that Order to commercial wireless services using the 747-762 MHz and 777-792 MHz bands.[52]

44. For both public safety and commercial services, we adopted geographic separation requirements to provide protection for analog TV stations' hypothetical Grade B contour (approximately 88.5 km or 55 miles from each station's transmitter).[53] For protecting DTV reception, we applied similar criteria to limit the permitted interfering signal of a new wireless licensee at a DTV station's hypothetical service contour.[54] Thus, the same level of protection effectively is mandated to analog and DTV stations (*i.e.*, the wireless station's interfering contour cannot fall within 88.5 km of the television station's transmitter).

Lower 700 MHz Band (Channels 52-59)

45. The Lower 700 MHz Band (698-746 MHz) is significantly more encumbered with TV operations than the Upper 700 MHz Band.[55] Unlike channels 60-69, early recovery of channels 52-59 (698-746 MHz) was not contemplated in the DTV transition plan. Both Congress and the Commission initially expected that the Lower 700 MHz Band would be made available for new services after the

[49] 47 U.S.C. § 337(d)(2) (codifying 1997 Balanced Budget Act § 3004).

[50] *Reallocation Report and Order*, 12 FCC Rcd at 22964-65, ¶ 24. *See also* Footnote NG159, Table of Frequency Allocations, 47 C.F.R. § 2.106.

[51] *See In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communications Requirements Through the Year 2010*, 14 FCC Rcd 152 (1998) ("*Public Safety Spectrum Report and Order*").

[52] *See In the Matter of Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, 15 FCC Rcd 476 (2000) ("*Upper 700 MHz First Report and Order*").

[53] *See Public Safety Spectrum Report and Order*, 14 FCC Rcd at 221, ¶ 152; *Upper 700 MHz First Report and Order*, 15 FCC Rcd at 532, ¶ 139. *See also* 47 C.F.R. §§ 90.545, 27.60. The Grade B contour for an analog UHF TV station is the locus of points at distances from the transmitter where the predicted signal level equals 64 dBu. The Grade B contour for an analog UHF TV station that is operating at a power level of 1 megawatt and an antenna height of 610 meters height above average terrain ("HAAT") is approximately 88.5 km (55 miles) from the station's transmitter.

[54] *See Public Safety Spectrum Report and Order*, 14 FCC Rcd at 222-23, ¶ 155; *Upper 700 MHz First Report and Order* 15 FCC Rcd at 532, ¶ 139. For a DTV station, the service contour is where the predicted signal level equals 41 dBu. The location of the "hypothetical service contour" for a DTV station is the same 88.5 km distance from the DTV transmitter as the hypothetical Grade B contour is from an analog TV transmitter.

[55] There are 101 full service NTSC incumbents and 166 DTV incumbents on channels 52-59.

auction of the Upper 700 MHz Band.[56] Although Congress did not specify the amount of spectrum to be reclaimed beyond the Upper 700 MHz Band, the Commission determined that all broadcasters could operate with digital transmission systems in channels 2-51 after the transition, thus allowing channels 52-59 to be reclaimed for new services.[57]

46. In January 2002, we released an Order reallocating and adopting service rules for the 698-746 MHz spectrum band.[58] We reallocated the entire 48 megahertz of spectrum in this band to fixed and mobile services and retained the existing broadcast allocation for new broadcast services. In addition, we retained the allocation for incumbent broadcast services in this band during the transition to DTV. In the *Lower 700 MHz Band Report and Order*, we adopted the same protection criteria for analog TV stations in that band as adopted for the Upper 700 MHz Band.[59] With respect to co-channel DTV interference, however, we concluded that a more conservative approach should be applied to ensure adequate protection from wideband wireless systems in the Lower 700 MHz Band.[60] The more conservative approach was warranted because the number and density of incumbent DTV stations in the Lower 700 MHz band is greater than in the Upper 700 MHz Band. For protection of DTV stations against adjacent channel interference, we adopted the same criterion applied to adjacent DTV stations in the Upper 700 MHz Band.[61]

TV Protected Service Contour Alternatives

47. In the *Public Safety Spectrum Report and Order*, we addressed the issue of whether to protect TV reception based on a geographic separation table using a standard 88.5 km (55 mile) Grade B service contour or a case-by-case approach protecting TV stations based on their "actual" Grade B contours.[62] Under the first approach, the minimum separation distances could be put in a table, thereby

[56] The 1997 Balanced Budget Act directed the Commission to reallocate certain portions of the Upper 700 MHz spectrum from broadcast use to commercial use by December 31, 1997, s*ee* 47 U.S.C. § 337(a) (added by § 3004 of the 1997 Balanced Budget Act), but not to commence competitive bidding for the commercial licenses on the reallocated spectrum before January 1, 2001, *see* 47 U.S.C. § 337(b)(2). That deadline was subsequently accelerated. *See* Consolidated Appropriations Act, 2000, Pub. L. No. 106-113, 113 Stat. 2502, app. E § 213; 145 Cong. Rec. H12493-94 (Nov. 17, 1999) ("Consolidated Appropriations Act"). By contrast, the former statutory deadline of September 30, 2002, for assigning licenses and reporting total auction revenues to Congress (*see* former 47 U.S.C. § 309(j)(14)(C)(ii)) was recently eliminated for all but the C and D block licenses in the lower 700 MHz band.

[57] *See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, 13 FCC Rcd 7418, 7435, ¶ 42 (1998).

[58] *In the Matter of Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, 17 FCC Rcd 1022 (2002) ("*Lower 700 MHz Report and Order*"). The auction of channels 54, 55, and 59 has closed and the post-auction licensing process is underway.

[59] *Id*. ¶ 38.

[60] Specifically, we adopted a desired/undesired ("D/U") ratio of 23 dB corresponding to a maximum land mobile or broadcast field strength of 18 dBu for co-channel transmissions. The Commission stated: "This criterion will best protect existing broadcast operations, which will likely remain in operation until the end of the transition to DTV, which may extend beyond the 2006 target date." *Id*. ¶ 56.

[61] The Commission adopted the criterion of – 23 dB D/U for protection of DTV stations against adjacent channel interference, the same as it applied for DTV stations in the Upper 700 MHz Band. *Id.*

[62] See 47 C.F.R. § 90.545(c).

simplifying planning of wireless communications systems. We expressed concern, however, that limiting TV and DTV separation from land mobile radio facilities to distances specified in a table could prevent public safety entities from fully using the spectrum in a number of major metropolitan areas until after the end of the transition. In order to give flexibility to public safety entities to locate base stations closer than the distance specified in the separation table without causing excessive interference to TV and DTV stations, we adopted alternative methods for demonstrating required interference protection.[63]

48. Specifically, three alternative methods of interference protection are specified in Section 90.545 of the Commission's rules. First, applicants may use the geographic separation specified in tables in the rules. Second, applicants may submit engineering studies to justify the proposed separations based on the "actual" parameters of the land mobile station and the "actual" parameters of the TV/DTV station(s) it is trying to protect. This method permits public safety applicants to take into account intervening terrain and engineering techniques, such as directional and down-tilt antennas, in determining the necessary separation to provide the required protection. Third, applicants may obtain written concurrence from the applicable TV or DTV station.[64] In the *Upper 700 MHz Report and Order* and the *Lower 700 MHz Report and Order*, we incorporated these alternative methods of interference protection for public safety applicants into Section 27.60 of the rules, which governs commercial wireless operations in the Upper and Lower 700 MHz Bands.[65]

2. Definition of "Actual" Broadcast Parameters Under Sections 90.545(c)(1)(ii) and 27.60(b)(1)(iii)

49. For each analog TV and DTV station, there are at least three types of facilities that may be eligible for interference protection: licensed facilities, facilities specified in a construction permit ("CP"), and the facilities requested in an application filed with the Commission. In addition, DTV

[63] *See Public Safety Spectrum Report and Order*, 14 FCC Rcd at 224, ¶ 158.

[64] 47 C.F.R. § 90.545(c). That provision states, in part:

> (1) Licensees of stations operating within the ERP and HAAT limits of paragraph (b) must select one of three methods to meet the TV/DTV protection requirements, subject to Commission approval:
>
> (i) utilize the geographic separation specified in the tables referenced below;
>
> (ii) submit an engineering study justifying the proposed separations based on the actual parameters of the land mobile station and the actual parameters of the TV/DTV station(s) it is trying to protect; or,
>
> (iii) obtain written concurrence from the applicable TV/DTV station(s). If this method is chosen a copy of the agreement must be submitted with the application.

[65] *See Upper 700 MHz Report and Order*, 15 FCC Rcd at 532, ¶ 139; *Lower 700 MHz Report and Order*, 17 FCC Rcd at 1068-69, ¶ 119. Because the new Lower 700 MHz Band licensees can use higher power than was allowed for Upper 700 MHz Band licensees, section 27.60(b)(1)(ii) also provides for a fourth alternative method, stating:

> (1) Licensees of stations operating within the ERP and HAAT limits of § 27.50 must select one of four methods to meet the TV/DTV protection requirements, subject to Commission approval: …
>
> (ii) when station parameters are greater than those indicated in the tables, calculate geographic separation in accordance with the required D/U ratios, as provided in paragraph (a) of this section; …

stations may also be entitled to protection of facilities that replicate their analog service area,[66] and/or the facilities specified in a DTV STA.[67] A number of the interference protection issues raised herein with respect to the 698-806 MHz band relate to the interpretation of the alternative protection criteria for wireless operators set forth in Sections 90.545(c) and 27.60(b) of the rules, and whether those provisions require protection of broadcast authorizations and allotments. In particular, do these provisions require protection of broadcast authorizations and allotments when the station's operating parameters are less than the parameters described in an existing authorization or allotment?

50. Sections 90.545(c) and 27.60(b) describe alternative methods for a wireless applicant or licensee in the 700 MHz band to move its stations closer to an analog TV or DTV antenna while still complying with the interference protection requirements in the rules. Pursuant to one of these alternatives, the applicant or licensee may submit an engineering study that considers the "actual," rather than "hypothetical," parameters of the analog TV or DTV station and that demonstrates that intervening terrain or other factors permit the land mobile stations and these facilities to be more closely spaced. In the Order adopting this alternative, we stated that applicants should be allowed to submit engineering studies showing how they propose to meet the appropriate desired/undesired ("D/U") signal strength ratio at the existing TV station's "authorized or applied for" Grade B service contour or equivalent contour for DTV stations instead of the hypothetical Grade B contour.[68]

51. We tentatively conclude that Sections 90.545(c)(1)(ii) and 27.60(b)(1)(iii) should be amended to make clear that the interference protection specified in those provisions should be afforded to authorized and/or applied for NTSC and DTV facilities, including the facilities specified on the broadcast station's license or construction permit or both when a station has both a license and a construction permit. We invite comment on this approach. If we do not protect all authorized and/or applied for facilities, what facilities should be protected?

3. Replication

52. We invite comment on the extent to which facilities defined in the DTV Table of Allotments on channels 52-69 should be protected by wireless operators and other services in those bands. In other words, in addition to protecting authorized and/or applied for facilities, should we interpret the requirement that wireless operators and other services protect the "actual" parameters of existing TV stations to require protection of full replication facilities, regardless of whether the DTV station is currently operating, or has filed an application to operate, pursuant to those facilities?[69] If so, how long should this interference protection last?

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[66] In creating the initial DTV Table of Allotments, each DTV allotment was chosen to permit the station's DTV service, to the extent possible, to match or "replicate" the Grade B service contour of the NTSC station with which it was paired. *Sixth Report and Order*, 12 FCC Rcd at 14605, ¶¶ 29-30.

[67] In the *First DTV Periodic Review MO&O* we permitted DTV stations to begin digital operations under an STA with facilities that provide at least the minimum permissible level of service to the community of license. These DTV STA facilities provide less coverage than the station's DTV allotment or than authorized by an outstanding CP or license.

[68] *Public Safety Spectrum Report and Order*, 14 FCC Rcd at 224, ¶ 158.

[69] For example, a station could be operating pursuant to a DTV construction permit, license, or STA with facilities that are less than full replication facilities.

53. We tentatively conclude that DTV full replication facilities should be protected as "actual." We seek comment on this view and on whether we should establish the same interference protection deadline for replication facilities for stations on channels 52-69 as we will establish in this proceeding for stations on in-core channels.[70] In order to allow new services to be provided in portions of replication areas that a DTV licensee may never plan to serve, should we establish an earlier replication protection deadline for any of these channels, and particularly channels 60-69? The Commission has planned for the early recovery of channels 60-69 since the development of the initial DTV allotments. In addition, there are relatively few television stations in this band as compared to the Lower 700 MHz Band.[71] Would an earlier replication protection deadline be appropriate for channels 60-69 to increase the incentive of broadcasters in this band to complete construction of their allotted facilities? If so, what deadline should be established?

4. Maximization

54. We invite comment on whether we should establish an earlier deadline for loss of interference protection to the unserved areas described in existing maximization authorizations on channels 52-69 than the deadline we establish for maximization facilities on in-core channels.[72] DTV broadcasters operating on out-of-core channels may have little incentive to incur the cost necessary to increase their coverage area as they will receive interference protection only until the end of the DTV transition. Nonetheless, DTV broadcasters in this band have applied for facilities to expand ("maximize") their coverage as well as to make other changes that alter the area they serve. For example, a broadcaster may have applied to co-locate its antenna site with that of other DTV broadcasters or may have been forced to move to a new site for zoning or other technical reasons. We also invite comment on whether we should establish the same maximization interference protection deadline for the entire 700 MHz band, or treat the upper and lower bands differently. For example, should we establish a shorter deadline for stations on channels 60-69 in view of the relatively small number of broadcast incumbents in this band and our commitment to early recovery of this spectrum? If we were to establish a different deadline for all or part of channels 52-69, what should that deadline be?

5. Future Modification Applications

55. In June 2002, the Media Bureau adopted a freeze on the filing of analog TV and DTV "maximization" applications in channels 52-59.[73] The Bureau announced that it would not accept for filing television modification applications that would increase a station's analog or DTV service area in channels 52-59 in one or more directions beyond the combined area resulting from the station's parameters as defined in the following: (1) the DTV Table of Allotments; (2) Commission authorizations (license and/or construction permit); and (3) applications on file with the Commission prior to release of the Public Notice. The Bureau will consider, on a case-by-case basis, requests for waiver of the freeze on new maximization applications in channels 52-59 where the application would permit co-location of

[70] The Commission has stated that it will protect the "full coverage area" of DTV stations until the end of the DTV transition period *Reallocation Report and Order*, 12 FCC Rcd at 22969-70, ¶ 36.

[71] *See Lower 700 MHz Report and Order*, 17 FCC Rcd at 1038-39, ¶ 38.

[72] *See* section C, *supra*.

[73] Public Notice, *Freeze on the Filing of TV and DTV "Maximization" Applications in Channels 52-59*, DA 02-1440 (rel. June 18, 2002).

transmitter sites or is otherwise necessary to maintain quality service to the public.[74] The freeze was adopted to assist participants in Auction No. 44, consisting of spectrum licenses in the Lower 700 MHz Band, to determine the areas potentially available in the band for the provision of service by auction winners before the channels are cleared of broadcast stations. That auction was scheduled to begin June 19, 2002, but was postponed in compliance with the Auction Reform Act of 2002.[75]

56. The Media Bureau recently adopted a similar freeze on the filing of analog TV and DTV "maximization" applications in channels 60-69.[76] As with the freeze on maximization in channels 52-59, the Bureau will consider requests for waiver of the freeze on channels 60-69 on a case-by-case basis for stations that propose an increase or shift in coverage under certain circumstances, including to permit co-location at a common antenna site or to resolve certain technical difficulties. We intend to protect applications for waiver under these maximization filing freezes in the same manner that we protect other pending applications. Absent a waiver, future applications for maximization of facilities on channels 52-69 now are foreclosed.

6. Applications for New Analog TV or DTV Facilities

57. In the *DTV Sixth Report and Order*, the Commission determined it would not authorize new DTV facilities in channels 60-69.[77] In the *Reallocation Report and Order*, we determined that we would not authorize additional new analog full-service television stations on channels 60-69, and that we would dismiss any application or allotment petition for a new analog facility that was not satisfactorily amended to specify a channel below channel 60 by the established deadline.[78] Thus, there will be no new analog TV or DTV entrants in the 746-806 MHz band that wireless and other new service providers must protect.[79]

58. In the *Lower 700 MHz Band Report and Order*, we dismissed pending petitions for new NTSC channel allotments in this band, stating that adding new analog TV allotments or stations at this stage of the transition would be inconsistent with the DTV transition process.[80] With respect to applications for construction permits for new analog TV stations in this band, we provided a 45-day opportunity for applicants to request a change in their pending applications to either (1) provide analog or digital service in the core television spectrum, *i.e.*, channels 2-51, or (2) provide digital service in the 698-740 MHz band, *i.e.*, channels 52-58.[81] Any applications or rulemaking proposals and later associated

[74] For example, waivers will be considered where zoning restrictions preclude tower construction at a particular site or where unforeseen events, such as extreme weather events or other extraordinary circumstances, require relocation to a new tower site. In particular, the Bureau has noted that it would be inclined to grant waivers of the freeze for broadcast stations that seek new tower sites due to the events of September 11, 2001.

[75] *See*, *supra*, n. 23.

[76] Public Notice, Freeze on the Filing of TV and DTV "Maximization" Applications in Channels 60-69, DA 03-46, rel. January 24, 2003.

[77] *DTV Sixth Report and Order*, 12 FCC Rcd at 14671, ¶ 182.

[78] *Reallocation Report and Order*, 12 FCC Rcd at 22971, ¶ 40. *See Public Notice*, 14 FCC Rcd 19559 (1999).

[79] However, pursuant to the requirements of Part 27, wireless and other new service providers must protect any new broadcast services provided on spectrum acquired through the commercial wireless auction.

[80] *Lower 700 MHz Band Report and Order*, 17 FCC Rcd at 1042, ¶ 44.

[81] *Id.*

applications filed by pending applicants during this 45-day window must be protected by wireless and other entities. Because of the adjacent channel interference that new stations on channel 59 could cause to new licensees in the adjacent Upper 700 MHz band, we concluded that we will no longer accept or grant any application for a new analog TV or DTV station on channel 59 nor permit an existing DTV station to modify its channel to channel 59. We required parties with outstanding applications specifying channel 59 to request another channel within 45 days after release of the *Lower 700 MHz Band Report and Order*.[82]

59. With respect to the Lower 700 MHz Band, digital service in the band could be proposed after the auction by a station with an existing DTV allotment on a channel outside the 52-58 band seeking to move to a channel inside this band or by a DTV station inside this band seeking to move to another channel inside the band. We invite comment on whether and how we should protect such proposed digital service on channels 52-58. The Commission has not precluded such new, post-auction digital service in channels 52-58, but should such service proposals be protected by wireless and other services operating on channels already acquired through auction? If so, how should these proposed digital services be protected, as auction bidders and winners may have no prior notice of the channels these digital operators may request? We clarify that any such protection afforded would be only for the duration of the transition since DTV stations out of the core must eventually move within the core. As a practical matter we expect few broadcasters to seek to move from the core into 52-58 because they would have to move again at the end of the transition. We also seek comment on whether 47 C.F.R. § 73.622 should be amended to require that a broadcaster proposing a channel change that would cause harmful interference to a new entrant on channels 52-59 demonstrate that no other suitable channels are available on 2-58 that would avoid such interference.

7. Channel 51

60. Finally, we seek comment on the interference protection that should be afforded by wireless entities and other new service providers to future analog TV and DTV facilities on channel 51 that are authorized or requested after the auction of the spectrum comprising channel 52. Channel 51 will remain allocated to broadcast use as part of the core television spectrum (channels 2-51), and is available for use by existing and new analog TV and DTV stations. However, because channel 51 is adjacent to channel 52, we are concerned about possible interference between new wireless licensees on channel 52 and operations on channel 51. In the *Lower 700 MHz Report and Order*, we declined to adopt a guard band or other specialized mechanism to protect DTV operations on channel 51, and stated that we would instead rely on interference protection criteria to ensure that new licensees adequately protect core channel TV and DTV operations.[83] We noted that the adjacent channel protection for TV and DTV stations on channels 52-69 is no different from the protection for those stations in the core spectrum; only the duration of that protection differs.[84] In light of our concern about possible adjacent channel interference, we seek comment on whether we should provide the same level of adjacent channel protection to future analog and digital broadcast facilities on channel 51 as is currently provided by wireless or other operators to incumbent analog and digital stations on this channel and, if so, how we can

[82] *Lower 700 MHz Band Report and Order*, 17 FCC Rcd 1042-43, ¶ 45.

[83] *Id*. ¶ 23.

[84] Because DTV stations on channels 52-69 will eventually relocate to the core TV spectrum, the broadcast interference protection standards on channels 52-69 will no longer apply after the transition. By contrast, the need for protection of broadcast operations on core TV channel 51 will continue indefinitely.

accomplish such protection without unduly restricting use of the channel 52 spectrum.

E. Pending DTV Construction Permit Applications

61. A number of television licensees have not yet been granted an initial construction permit ("CP") for a DTV facility. Almost all of these licensees have filed an application for a digital CP, but grant of these applications has been delayed for a variety of reasons including delays in international coordination with Canada and Mexico and unresolved interference issues. While the Commission has successfully resolved a number of obstacles to grant of outstanding digital CP applications, and the number of licensees without an initial digital CP has been significantly reduced, approximately 140 commercial and noncommercial television licensees still have not yet been granted an initial DTV CP. To date, these applicants have not been required to construct DTV facilities pending action on their outstanding DTV applications.

62. To ensure that all licensees that have been awarded digital spectrum begin to provide digital service, we propose to require that all such television licensees that have filed an application for a digital CP with the Commission that has not yet been granted must commence digital service pursuant to special temporary authority ("STA") within one year from adoption of the Report and Order in this proceeding. Within this time frame, these applicants would be required to request an STA from the Commission and to construct at least the minimum initial facilities required to serve their community of license, as specified in the policy outlined in the *First DTV Periodic Review MO&O*.[85] These STA facilities would necessarily be equal to or less than those specified in a station's initial DTV allocation as specified in Appendix B of the DTV *Sixth Report and Order*.[86] Such facilities generally require minimal or no international coordination. The Commission will consider requests for waiver of this construction deadline, on a case-by-case basis, in limited circumstances (*e.g.*, where the construction requirement would be unduly burdensome because the licensee is seeking to move its tower site from its initial location, or where grant of the initial CP application appears imminent). While the Commission will continue to work with applicants to resolve outstanding issues and to process pending applications for digital facilities, this proposal would ensure that applicants that have not yet received a digital CP begin to construct and operate at least the minimum initial digital facilities permitted under our rules, and begin to provide service to their community. We request comment on this proposal. We also request comment on whether the channel election and interference protection deadlines adopted in this proceeding should apply to these licensees and, if not, what other deadlines would be appropriate.

F. Noncommercial Educational Television Stations

63. Noncommercial television broadcasters are scheduled to complete construction of their digital stations and commence digital service by May 1, 2003. As noted above, 84 of the 373 noncommercial television stations are already airing a digital signal ahead of schedule. In the DTV *Fifth Report and Order*, we acknowledged the financial difficulties faced by noncommercial stations in constructing digital facilities.[87] We gave noncommercial licensees the longest period of time to complete construction of any

[85] *First DTV Periodic Review MO&O*, 16 FCC Rcd at 20608-09, ¶¶ 34-36; 47 C.F.R. § 73.625(a)(1).

[86] DTV Table of Allotments*, Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, 14 FCC Rcd 1348 (1998), *recon. dismissed*, DA 99-1361, rel. July 12, 1999, *recon. dismissed*, FCC 00-59, rel. February 23, 2000, at Appendix B.

[87] *Fifth Report and Order*, 12 FCC Rcd at 12852, ¶ 104.

category of DTV applicant, and stated that we would consider in our periodic reviews what additional special treatment, if any, should be afforded to noncommercial broadcasters.

64. We invite comment on whether noncommercial broadcasters that are not already airing a digital signal anticipate they will meet the May 1, 2003 construction deadline. For any station that does not anticipate meeting the deadline, what obstacles are preventing completion of construction? We also invite comment generally on what steps, if any, the Commission should take to assist noncommercial stations in the transition to DTV. For example, should the financial hardship standard for grant of an extension of time to construct a digital television station be applied differently to noncommercial licensees?

G. Simulcasting

65. In the DTV *Fifth Report and Order*, we adopted rules requiring DTV licensees to simulcast 50% of the video programming of their analog channel on their DTV channel by April 1, 2003. This requirement increases to a 75% simulcast requirement in April 2004, and a 100% requirement in April 2005.[88] The simulcasting requirement was intended to ensure that consumers will enjoy continuity of free over-the-air program service when we reclaim the analog spectrum at the conclusion of the transition. We stated that it may be difficult to terminate analog broadcast service if broadcasters show programs on their analog channels that are not available on their digital channels.[89] We recognized that we would need to clearly define simulcasting in the context of DTV, and stated that we would do so as part of our periodic reviews or other appropriate proceeding.[90]

66. We seek comment on whether we should retain, revise or remove the simulcast requirement, how to define simulcasting, and whether the existing dates are appropriate. What extent of program duplication should be required to fulfill simulcasting obligations? Does the ultimate requirement of 100% simulcasting other than at the very end of the transition create disincentives for broadcasters to innovate? If broadcasters have a market-based incentive to simulcast and currently are simulcasting 100% of their analog programming on their digital channel, is a regulatory requirement to simulcast necessary? Is the simulcasting requirement causing broadcasters to forego creative uses of digital technology? Would something less than a 100% simulcast requirement be sufficient to protect analog viewers while allowing for innovation on the DTV channels? If maintaining some simulcast obligation is appropriate, we seek comment on whether we should revise the current dates for the phase-in of simulcast requirements.

67. The Commission has used the term simulcasting in different ways in the DTV proceedings, including simultaneous carriage of the same programming on two different channels and the broadcast on one channel of the same basic material broadcast on the paired channel, excluding commercials and promotions, within 24-hours.[91] Any simulcasting requirement should allow broadcasters to take advantage of the flexibility of the DTV channel. Therefore, "same program" would be interpreted broadly to allow broadcasters to take advantage of various digital features, including

[88] *Fifth Report and Order*, 12 FCC Rcd at 12832, ¶ 54, *see also* 47 C.F.R. § 73.624(f).

[89] *Fifth Report and Order*, 12 FCC Rcd at 12833, ¶ 56.

[90] *Id.*

[91] *First Report and Order*, 5 FCC Rcd 5627 n.1 (1990); *Memorandum Opinion and Order/Third Report and Order/Third Further Notice of Proposed Rule Making,*, 7 FCC Rcd 6924, 6978 (1992).

different camera angles and aspect ratios, additional program information, and interactivity. We propose a definition of simulcasting in the DTV context as follows:

> Within a 24-hour period, the broadcast on a digital channel of the same programming broadcast on the analog channel, excluding commercials and promotions and allowing for enhanced features and services.

We request comment on this proposed definition. We also seek comment on how simulcast requirements and the definition of "simulcasting" relate to the substantial duplication decisions in the must carry portions of the Act.[92]

Effect on Prime Time Broadcasting Requirements

68. If we decide to eliminate or change the simulcasting requirements, we must adjust the digital broadcast schedule requirements that are currently pegged to the simulcast requirements. In the *First DTV Periodic Review MO&O,* we allowed DTV stations subject to the May 1, 2002, or May 1, 2003, construction deadlines, including stations subject to those deadlines that were currently on the air early, to operate initially at a reduced schedule by providing, at a minimum, a digital signal during prime time hours, consistent with their simulcast obligations.[93] We propose that, if we eliminate or reduce the simulcasting requirements in Section 73.624(f), we amend Section 73.624(b)(1) to require DTV stations subject to the May 1, 2002, or May 1, 2003, construction deadlines to air, by April 1, 2003, a digital signal for an amount of time equivalent to 50% of the amount of time they provide an analog signal. The digital signal must be aired during prime time hours. This minimum digital operation requirement would increase to 75% on April 1, 2004 (requiring airing of a digital signal for an amount of time equivalent to at least 75% of the amount of time the station airs an analog signal), and to 100% on April 1, 2005.[94] We seek comment on this proposal and invite alternatives as well.

H. Section 309(j)(14)

69. Section 309(j)(14)(A) of the Communications Act requires the Commission to reclaim the 6 MHz each broadcaster uses for transmission of analog television service by December 31, 2006. Congress recognized, however, that not all stations will convert to DTV at the same time.[95] Thus, "to ensure that a significant number of consumers in any given market are not left without broadcast television service as of January 1, 2007,"[96] Congress required the Commission in Section 309(j)(14)(B) to grant extensions to any station in any television market if one or more of three conditions exist. We review below the language of Section 309(j)(14) and invite comment on how we should interpret certain portions

[92] 47 U.S.C. §§ 614(b)(5) and 615(b)(3)(C).

[93] *First DTV Periodic Review MO&O*, 16 FCC Rcd at 20598-99, ¶¶ 11-12.

[94] Noncommercial television stations are not required to complete construction of their DTV facilities until May 1, 2003, later than the April 1, 2003 simulcast and minimum digital operation requirements. For these stations, the simulcast and minimum digital operation requirements become effective May 1, 2003 when these stations commence digital operation. Similarly, for television stations that have been granted an extension of time to complete construction of their DTV facilities, the station must comply with the simulcast and minimum digital operation requirements in effect at the time the station commences digital operations.

[95] Balanced Budget Act of 1997, 105th Cong., 1st Sess. Conf. Rep. 105-217, 576 (1997) ("Conference Report").

[96] *Id.*

of that statutory provision. We also seek comment on establishing rules and filing deadlines governing how and when extension requests will be made.[97]

70. Section 309(j)(14) 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.[98]
>
> (B) EXTENSION. – The Commission shall extend the date described in subparagraph (A) for any station that requests such an 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 602) 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 –

[97] On September 25, 2002 the Subcommittee on Telecommunications and the Internet of the House Committee on Energy and Commerce held a hearing concerning the digital transition and discussed draft omnibus Digital Television legislation that would amend the Communications Act by deleting Section 309(j)(14), thus eliminating the provisions that currently provide for the Commission to extend the deadline by which television broadcasters must cease analog television service. *See* http://energycommerce.house.gov/107/drafts/dtvstaff.htm

[98] License renewal authorizations granted by the Commission with terms extending beyond December 31, 2006, contain the following language: "on December 31, 2006, or by such other date as the Commission may establish in the future under Section 309(j)(14)(A) and (B) of the Communications Act, the licensee shall surrender either its analog or its digital television channel for reallocation or reassignment pursuant to Commission regulations. The channel retained by the licensee will be used to broadcast digital television only after this date."

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

(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.

Filing of Extension Requests

71. Section 309(j)(14)(B) provides that the Commission shall extend the date by which stations must cease analog service for qualifying stations that request an extension. We intend to develop a form to be used by stations to request an extension under this provision. We invite comment on when stations seeking an extension should be required to file their extension request. In general, we believe that extension requests should be filed sufficiently far in advance of the December 31, 2006, deadline to allow review of the request, but also as close as possible to the December 31, 2006, statutory deadline so that they more accurately reflect the full extent of transition progress in the applicable market at that time. We invite comment on the period of time for which extensions should be granted. We also invite comment on whether the Commission may grant a blanket extension under Section 309(j)(14)(B) to all stations in a market or nationally if the Commission finds that the criteria for return of analog spectrum have not been met. What findings would the Commission need to make in order to grant a blanket extension?

Definition of Television Market

72. Under Section 309(j)(14)(B), the Commission must consider whether any one of the three conditions for an extension exist in the requesting station's "television market." For purposes of applying Section 309(j)(14)(B), we invite comment on how we should define "television market." One option would be to define "television market" as the designated market area or DMA, as defined by Nielsen Media Research, in which the television station requesting the extension is located. A DMA is a geographic market designation that defines each television market based on measured viewing patterns.[99] Nonoverlapping DMAs cover the entire continental United States, Hawaii, and parts of Alaska. Counties are assigned to a market based on which home-market stations receive a preponderance of total viewing hours in the county.[100] Every television station in the United States is assigned to a DMA by Nielsen.[101] Another option would be to define "television market" as the requesting station's Grade B contour. Each television station has its own Grade B contour. While the Grade B contours of stations often overlap, two stations are unlikely to have identical Grade B contours. Thus, under a Grade B market definition, the

[99] For purposes of this calculation, over-the-air, cable, and satellite-delivered television viewing are included.

[100] In other proceedings, the Commission has recognized that the DMA is more descriptive of a broadcast television station's potential market than the station's Grade B contour. The DMA more accurately captures actual television viewership patterns, as it considers cable carriage as well as over-the-air reception of broadcast signals. *See*, *e.g.*, *Report and Order*, *Review of the Commission's Regulations Governing Television Broadcasting*, MM Docket No. 91-221,14 FCC Rcd 12903, 12926, ¶ 48 (1999); *Second Further Notice of Proposed Rule Making*, MM Docket No. 91-221, 11 FCC Rcd 21655, 21663, ¶ 15 (1996).

[101] U.S. territories have not been designated as DMAs by Nielsen.

applicable market to be analyzed would be unique for each station requesting an extension.

73. Use of DMAs to define the applicable market may be more consistent with the language of Section 309(j)(14), which requires the Commission to grant an extension to "any station that requests such an extension in any television market."[102] This language seems to contemplate that each market will contain more than one television station, as is generally true of DMAs. The Grade B contour of any station requesting an extension, in contrast, is generally unique for each station, and therefore contains only one station. A Grade B test may also be more difficult to administer as market data, including information about digital-to-analog converter technology and the number of television households with digital television reception capability, would have to be compiled for the area within each requesting station's Grade B contour, rather than DMA-wide.

74. Use of DMAs to define the applicable market for purposes of Section 309(j)(14)(B) would ensure that transition progress throughout the DMA is considered in determining whether the criteria for extension have been met. DMAs include virtually all urban and rural areas, thus ensuring that all television households are included. Thus, for example, under Section 309(j)(14)(B)(ii) (the "converter technology test"), the Commission would consider whether digital-to-analog converter technology is "generally available" throughout the DMA to determine whether an extension under this provision is warranted. A DMA test would permit the entire DMA to convert to an all-digital broadcast system at the same time. Analog service in the DMA would likely cease only when the conditions for an extension no longer exist throughout the DMA.[103] The Grade B contour reflects a station's over-the air viewing area, while the DMA more closely reflects where the station's signal is also available via cable and satellite, thus reflecting the station's market for purposes of advertising sales.[104] As parts of the United States, particularly in rural areas, do not lie within the Grade B contour of any full-power television station, a Grade B test would not consider transition progress in these areas before cessation of analog service.

75. A Grade B market definition, in contrast, may be more consistent with Section 309(j)(14)(B)(iii)(I), which requires grant of an extension where 15 percent or more of the television households in the market do not subscribe to an MVPD that carries "each" of the television stations broadcasting a digital signal in the market. Under a DMA market definition, if this provision were interpreted to require carriage of *all* stations in the market, it would be difficult, if not impossible, to meet this test, as cable systems almost never carry all stations in the DMA. Cable systems are more likely to carry all television stations within a given station's Grade B contour, however.[105]

76. If we define the applicable market by reference to a station's Grade B contour, we invite comment on whether we should refer to the station's analog Grade B or the equivalent digital contour. In

[102] 47 U.S.C. § 309(j)(14)((B).

[103] Although the statute provides that extensions are to be provided only to requesting stations, we assume that most if not all stations in a market will apply for an extension if it appears that conditions warranting an extension exist in the market. Nonetheless, it is possible that some stations will chose to cease analog transmissions by December 31, 2006, without requesting an extension.

[104] *See*, *e.g.*, *Report and Order*, *Review of the Commission's Regulations Governing Television Broadcasting*, MM Docket No. 91-221,14 FCC Rcd 12903, 12924-25, ¶ 43; 12928, ¶ 50 (1999) (concluding that some of a station's viewers may live outside its designated DMA, but "the preponderance of its audience will reside within its DMA") Id. at ¶ 50.

[105] *See*, *infra*, discussion of 15% test.

addition, does the market of a station requesting an extension under Section 309(j)(14) include only the requesting station's Grade B contour, or also the Grade B contour of any TV translator retransmitting the requesting station's signal?[106] While including the Grade B contour of TV translators would increase the number of households considered in determining whether the transition criteria have been met, it also makes the requesting station's market subject to change as TV translators are secondary facilities and could be required to reduce coverage or cease service by a mutually exclusive, primary facility.[107]

77. The Grade B contour of many stations reaches more than one DMA. Under a DMA-only market test, a station could be denied an extension of its analog license without consideration of the status of the transition in a neighboring DMA where the station may have a significant number of viewers. To address this situation, another option would be to adopt a modified DMA market test that considers viewers in adjacent DMAs in situations where stations have a significant number of viewers in those DMAs. For example, where a station requesting a transition extension has a significant number of viewers in a DMA other than its designated DMA ("home DMA"), we could require that both DMAs meet the statutory criteria for the transition in Section 309(j)(14)(B). The advantage of such a modified DMA test is that it permits the necessary market analysis under Section 309(j)(14)(B) to be conducted on a DMA-wide rather than a Grade B basis, which better reflects the station's market and ensures that all households are considered, as well as significantly reducing the administrative burden and cost of the analysis, while ensuring that stations with significant viewership in more than one DMA have the status of the transition in each DMA considered before being required to cease analog service. We request comment on this approach. What percentage of viewership in other DMAs should be required before we include those other DMAs in the station's market (*e.g.*, define the market to include any DMA in which 30% or more of the station's viewers reside)? In a DMA other than the home DMA, should we require that 85% or more of the households in the market have access to digital signals as defined in Section 309(j)(14)(B)(iii), or should we adopt a lower threshold number in these DMAs (*e.g.*, no extension where 60% or more of households have access to digital service)? Do we have the authority under Section 309(j)(14)(B) to adopt a threshold below 85% in a second DMA? If we adopt a lower threshold number for DMAs other than the home DMA, what should that threshold amount be? Alternatively, we can retain the 85% criteria for each DMA but grant a station's request for extension if both its home DMA and the adjacent DMA where a significant percentage of its Grade B service is received do not meet the criteria in Section 309(j)(14).[108]

78. How we define the "market" is important in applying each of the conditions for an extension under Section 309(j)(14)(B). We request comment on the impact of a DMA, modified DMA, or Grade B market definition on the availability of extensions under each of these conditions. For example, under Section 309(j)(14)(B)(iii)(I), an extension is available in a market where 15 percent or more of the television households in the market do not subscribe to an MVPD that carries one of the digital channels of each television station broadcasting in digital in the market. What would the effect be on the 15% test for an extension of defining the market as the station's DMA when the DMA is geographically very large,

[106] *See, e.g.,* 17 U.S.C. § 119(a)(2), (d)(10) (households are deemed served by a station if they receive a signal of Grade B intensity). Such signals may be delivered by translator rather than the main station transmitter and may be outside the Grade B contour.

[107] The Commission does not presently have rules governing digital LPTV, translator, and booster operations. We intend to initiate a separate proceeding on digital operations by these facilities in the near future.

[108] For example, a station designated to the Miami DMA but with a significant percentage of the households within its Grade B service area who are in the West Palm Beach DMA would be granted an extension until both the Miami and West Palm Beach DMAs meet the 85% criteria.

thus increasing the likelihood that stations within the DMA would substantially duplicate each other or be unable to deliver a good quality signal to all the cable systems in the DMA?[109] If DMA is used for purposes of defining "television market," what effect, if any, would market modifications pursuant to Section 614(h)(1)(C) have on the appropriate definition.[110] We invite comment on this point and other definitions of "market" for purposes of Section 309(j)(14)(B) and justifications therefore.

Network Digital Television Broadcast Test

79. Under the first ground for an extension under Section 309(j)(14)(B), the Commission must grant an extension if one or more of the stations in the market that are licensed to or affiliated with one of the four largest national television networks[111] is 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."[112] We invite comment on how we should interpret this provision. We read the language of Section 309(j)(14)(B)(i) to require that all stations in a market licensed to or affiliated with a top-four network must be broadcasting in digital before analog service is required to cease in the market, even if a top-four network has more than one affiliate in the market. We request comment on this view. Should we consider a station that is broadcasting a digital signal pursuant to a DTV STA, and providing service in compliance with the Commission's minimum initial digital television construction requirements,[113] to be "broadcasting a digital television service signal" for purposes of this provision? We propose that a station not meeting such minimum initial DTV operating requirements would not be considered to be "broadcasting a digital television signal" within the meaning of this provision. Thus, extensions would be available under Section 309(j)(14)(B)(i) in any market where a top four network affiliate is not providing digital service in accordance with at least the Commission's minimum requirements for coverage of the community of license and hours of operation.[114] We request comment on this proposal.

80. Under this interpretation -- requiring compliance only with the Commission's minimum initial DTV construction requirements -- an extension of time would not be available to stations in a market where the broadcast stations owned by or affiliated with a top four network were providing the minimum digital service permitted under our rules but were not yet providing digital service that fully replicates their analog service area. Under such interpretation, viewers dependent upon off-air reception and accustomed to receiving such a network station's analog signal, but who are outside the coverage area of the station's digital signal, could lose off-air service from the station when analog service is terminated.[115]

[109] *See*, *infra*, discussion of 15% test.

[110] *See* 47.U.S.C. § 534(h)(1)(C).

[111] Currently, the top four television broadcast networks in the U.S. are ABC, CBS, NBC, and Fox.

[112] 47 U.S.C. § 309(j)(14)(B)(i).

[113] *See* 47 C.F.R. § 73.625(a)(1)(transmitter location and city grade coverage requirement); 73.624(b)(digital signal transmission and quality requirements and minimum hours of operation).

[114] Two top-four network affiliated television stations in New York City (WABC-DT and WNBC-DT) were taken off the air as a result of the September 11, 2001 terrorist attack and have not yet rebuilt their DTV facilities. These stations have STAs to remain silent and are reconstructing.

[115] This loss of service could arise either because the network-owned station or network affiliate itself was denied an extension of the December 31, 2006, date for cessation of analog service, or because the station simply ceased broadcasting its analog signal on December 31, 2006, in accordance with the statute.

Alternatively, we could require that a station be providing service to the entire area encompassed within the station's DTV allotment in order to be considered "broadcasting a digital television service signal" in the market under 309(j)(14)(B)(i). Under this interpretation, the Commission could not deny a request for extension of the deadline to cease analog broadcasts in a market where viewers accustomed to and dependent upon off-air reception of the analog signal of a top four network owned or affiliated station were not within the coverage area of that station's digital signal.[116] To ensure that stations not postpone replication to delay return of analog spectrum, we propose that if we require service to the full replication area under 309(j)(14)(B)(i), we would not consider lack of replication to constitute lack of service after the replication protection deadline adopted in this proceeding.

81. Although NTSC service area replication is not mandatory, we believe that most DTV broadcasters will eventually fully replicate their NTSC service areas with DTV service. If we determine that a station must provide service to the entire area encompassed within the station's DTV allotment in order to be considered "broadcasting a digital television service signal" in the market under Section 309(j)(14)(B)(i), we may need to revisit our decision not to require full replication.

Converter Technology Test

82. Under the second ground for an extension under Section 309(j)(14)(B), the Commission must grant an extension to a requesting station if the Commission finds that digital-to-analog converter technology is not "generally available" in the market. For purposes of Section 309(j)(14)(B)(ii), we propose to define as a "digital-to-analog converter" units that are capable of converting a digital television broadcast signal to a signal that can be displayed on an analog television set. We invite comment on this definition. Should we consider as a "digital-to-analog converter" a unit that is not capable of displaying in analog format signals originally broadcast in all digital formats? We understand, for example, that some digital cable boxes can display in analog format digital signals originally broadcast in the equivalent of 480i format but not other digital formats, including HDTV. Should these units be considered under 309(j)(14)(B)(ii)?

83. We also request comment on how we should interpret the phrase "generally available" under Section 309(j)(14)(B)(ii). For example, should we require only that digital-to-analog converter boxes be available for sale at retail outlets in the market or for sale or lease from cable operators or satellite providers? How widespread must the availability be to be considered "generally available?" For example, is availability in one retail chain or from one cable operator "generally available?" Should availability for purchase over the internet be considered? Should the price of such units be considered? Is it sufficient if digital-to-analog converters have been introduced in the market, or should we also examine the number of digital-to-analog converter units already purchased and in use by consumers in the market? Should we also address the possibility of lack of general availability of converters in the face of widespread availability of DTV sets with integrated or non-integrated tuners, thus eliminating the need for converters? What if cable systems in the market are providing signals downconverted from digital to analog at the cable headend so that a digital-to-analog converter is not necessary to view DTV signals?

15 Percent Test

[116] Loss of service could arise even under this interpretation if a television station that did not provide fully replicated digital service chose to cease analog transmissions without seeking an extension of the December 31, 2006, deadline.

84. Section 309(j)(14)(B)(iii) provides for a third ground for extension for markets that do not qualify under Sections 309(j)(14)(B)(i) or (ii). Section 309(j)(14)(B)(iii) sets forth a two-part test. The first prong of the test, described in Section 309(j)(14)(B)(iii)(I), is met where 15 percent or more of the television households in the market do not subscribe to an MVPD (as defined in 47 U.S.C. § 602) that "carries one of the digital television service programming channels of each of the television stations broadcasting such a channel in such a market."

85. Read literally Section 309(j)(14)(B)(iii)(I) appears to require that an MVPD, such as a cable system, must be carrying all of the television stations broadcasting a digital channel as a first step to satisfy this prong of the test. Read thus, if one or two digital television stations in a market are not carried by a cable or satellite provider (*e.g*, because the station is not carried voluntarily and is not eligible for mandatory carriage[117]), then the criterion is not met. In almost all DMAs, there are stations that are not entitled to must-carry on cable systems in the DMA and that are not carried by the systems voluntarily. Did Congress intend that this prong would be very rarely satisfied in a market?

86. The Conference Report that accompanies Section 309(j)(14)(b) states:

> The conferees emphasize that, with regard to the inquiry required by section 309(j)(14)(B)(iii)(I) into MVPD carriage of local digital television service programming, Congress is not attempting to define the scope of any MVPD's "must carry" obligations for digital television signals. The conferees recognize that the Commission has not yet addressed the "must carry" obligations with respect to digital television service signals, and the conferees are leaving that decision for the Commission to make at some point in the future. However, for purposes of the inquiry under this section, a television household must receive at least one programming signal from each local television station broadcasting a digital television service signal in order not to be counted toward the 15 percent threshold.[118]

87. Is the statutory language clear on its face? Does the Conference Report shed light on Congress' intent? We invite comment on whether there is a more flexible interpretation of the language in the statute. How should this language influence our definition of "market?" Can we conclude that only television broadcast stations that provide a good quality digital signal to the MVPD headend or local receive facility are contemplated by this language? If we use DMA as the market definition, what effect, if any, do market modifications pursuant to Section 614(h)(1)(C)[119] have on the stations contemplated by Section 309(j)(14)(B)(iii)(I)? If we interpret Section 309(j)(14)(B)(iii)(I) as requiring carriage of only those digital stations in the market entitled to must-carry, the availability of extensions under this provision will be more limited, and the market is likely to transition to digital more quickly. On the other hand, if we interpret Section 309(j)(14)(B)(iii)(I) as requiring that all stations broadcasting digital signals be carried

[117] Not every station in every market is required to be carried pursuant to mandatory carriage (e.g., if it does not provide a good quality signal to the headend; it substantially duplicates the signal of another television station in the market, or the cable system has reached its one-third channel capacity),*See* 47 U.S.C. §§ 534(b)(1), (5), 534(h)(1)(B)(iii), 535(e), (g)(4), 47 C.F.R. §§ 76.55(c)(3), 76.56(a), (b)(5) (for commercial and noncommercial television stations on cable); 47 U.S.C. §§ 338(b),(c), 47 C.F.R. § 76.66(g), (h) (for commercial and noncommercial television stations on satellite).

[118] Conference Report at 577.

[119] *See* 47 U.S.C. § 534(h)(1)(C).

regardless of the station's must-carry rights and signal delivery capability, this prong may be satisfied less often.[120] Moreover, a station could refuse to grant retransmission consent,[121] and prevent carriage, which would in turn prevent the MVPD from counting towards the market transition. As a result, the analog licenses would be extended in every market in which the 15% criteria is not met by households possessing over-the-air digital or down-conversion equipment. Is this the result that Congress intended or that is compelled by the language in the statute?

88. We also invite comment on whether, under Section 309(j)(14)(B)(iii), MVPDs must carry only primary, full power television stations in the market, or also Class A LPTV stations [122] or other secondary non-Class A LPTV stations and TV translators. Secondary broadcast facilities must yield to mutually exclusive primary broadcast facilities. Class A, LPTV, and TV translator facilities are not protected from interference from certain other television broadcast facilities, and could be required to limit or cease broadcast service if they interfere with a new or modified mutually exclusive primary broadcast facility. In addition, while certain Class A, LPTV, and TV translators receive cable carriage, most do not. Thus, if Section 309(j)(14)(B)(iii) is read to require carriage of all of these facilities in the market, and "market" is defined as DMA, then this prong of the transition criteria will be satisfied less often. If, as discussed above, the market is defined as the station's Grade B contour or service area, then it may be more likely that cable systems within the station's Grade B area would carry that station (e.g., the signal quality issue is less likely to arise). How does this result influence our decision on the proper definition of market?"

89. It is likely that most viewers will subscribe to an MVPD carrying digital broadcast signals, but will not initially invest in equipment that allows them to view these signals. Although the statutory language of this provision refers only to MVPD carriage of the signal, it would arguably be inconsistent with the intent of Section 309(j)(14)(B) not to count such viewers toward the 15% threshold. Accordingly, we invite comment as to whether MVPD subscribers should count toward the 15% threshold if they cannot actually view digital television signals carried by the MVPD. The language of Section 309(j)(14)(B)(iii)(I) on its face does not appear to require subscriber ability to view digital signals. We believe that interpreting this statutory provision to require ability to view the digital signals, however, is consistent with the congressional purpose underlying the availability of extensions under Section 309(j)(14)(B); that is, to ensure that a significant number of consumers not lose access to television service during the transition from analog to digital.[123] Accordingly, we propose that, in order not to be counted toward the 15 percent threshold under Section 309(j)(14)(B)(iii)(I), a household must subscribe to a qualifying MVPD and must also have the capability to view digital broadcast signals. We seek comment on this view. We tentatively conclude that, under 309(j)(14), MVPD subscribers may receive signals in either digital mode (*e.g.*, via either a DTV-capable set with an integrated tuner or a separate DTV set-top converter), or in analog mode

[120] Cable and satellite mandatory carriage requirements for digital signals are the subject of a separate proceeding. *Carriage of Digital Television Broadcast Signals*, First Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 2598 (2001) ("*DTV Must Carry Report and Order*").

[121] *See* 47 U.S.C. § 325(b).

[122] Class A stations are low power television broadcast stations that have a hybrid spectrum status: that is, they must be protected by other full and low power television broadcast stations, but not by DTV stations seeking to maximize power or make technically necessary adjustments to allotted engineering parameters.

[123] *See id.*, 576-577 ("Thus, to ensure that a significant number of consumers in any given market are not left without broadcast television service as of January 1, 2007, the conference agreement includes new section 309(j)(14)(B) of the Communications Act which requires the Commission to grant extensions to any station in any television market if any one of the following three conditions exist.").

(*e.g.*, a digital signal converted to analog by a set-top digital-to-analog converter that allows the signal to be displayed on a non-DTV set). We invite comment on whether cable systems that downconvert digital signals to analog at the cable headend should be considered to be "carrying" digital broadcast signals within the meaning of Section 309(j)(14)(B)(iii)(I). What if the cable system carries the signal in analog format because the signal was delivered to the cable headend via a TV translator that operates only in analog format (*e.g.*, the parent station's signal was originally broadcast in digital format and downconverted by the translator)? Similarly, how should we count viewers who receive over-the-air analog signals from a translator that has downconverted and rebroadcast the main station's digital signal? Are such viewers counted toward the 85% if they have DTV tuners even though the stations in their market are not delivering digital signals to them? Is the purpose of Section 309(j)(14): to ensure that viewers do not lose access to broadcast signals, to ensure that the transition to digital actually occurs, or both?

90. Under the second part of the 15% test, an extension should be granted if 15 percent or more of the television households in the market 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 (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."[124]

91. We invite comment on how we should interpret the phrase "capable of receiving the digital television service signals of the television stations licensed in such market." Does this phrase require that a household be capable of over-the-air reception of all television stations licensed in the market in order not to be counted toward the 15 percent threshold for an extension? Under this interpretation, any household outside the service contour of any digital station in the market would be counted toward the 15 percent threshold under these provisions (recognizing that such households could be excluded from counting toward the 15 percent under 309(j)(14)(B)(iii)(I) if they are MVPD subscribers as defined in that provision). What if a household receives a parent station's signal rebroadcast in analog format via TV translator (*e.g.*, the parent station originally broadcast the signal in digital format and the signal was downconverted to analog format by a TV translator)? We note that Section 74.701 of the Commission's rules requires that TV translators retransmit the signals of the parent station "without significantly altering any characteristic of the original signal other than its frequency and amplitude."[125] Should our rules permit TV translators to downconvert to analog format a signal originally broadcast by the parent station in digital format? As a separate issue, we propose to define television receivers "capable of receiving" DTV signals under 309(j)(14)(B)(iii)(II)(a) as television sets equipped with either integrated or separate (*e.g.*, set-top box) DTV tuners, and request comment on this definition.

92. For purposes of calculating households in the market to determine whether the 15 percent test is met under both prongs of Section 309(j)(14)(iii), we propose to interpret that provision as requiring grant of an extension where 15 percent or more of the television households in the market neither subscribe to an MVPD that carries local DTV signals (309(j)(14)(B)(iii)(I)), as defined above, nor have equipment capable of displaying signals originated in DTV (309(j)(14)(B)(iii)(II)). In other words, for a

[124] 47 U.S.C. § 309(j)(14)(B)(iii)(II).

[125] 47 C.F.R. § 74.701(a). Section 74.731(d) of the rules also states: "The technical characteristics of the retransmitted signals shall not be deliberately altered so as to hinder reception on conventional television broadcast receivers." 47 C.F.R. § 74.731(d).

household to be counted in the 15 percent, that household must both be a non-subscriber ("non-subscriber" may include subscribers to MVPDs that carry the required DTV stations but who lack equipment to view such signals in either analog or digital format) and lack the capability to receive DTV signals over-the-air, either through a set with an integrated DTV tuner, via a DTV set-top box, or via a digital-to-analog downconverter. We believe that this interpretation best reflects the intent of Congress that "a significant number of consumers in any given market are not left without broadcast television service" as we transition from analog to digital.[126] Accordingly, we propose to grant extensions under Section 309(j)(14)(B)(iii) only where the requisite number of television households (15 percent or more) in the market are not capable of receiving digital signals either over the air or via an MVPD.[127] We request comment on this view.

Fact Finding Under 309(j)(14)(B)

93. Finally, we invite comment as to who bears the burden of demonstrating whether an extension of time is warranted under Section 309(j)(14). Depending upon the grounds advanced by the requesting station, extensive information collection could be required to establish that the criteria for an extension are met in the market. For example, determining the number of television households in the market that have access to digital signals, either by off-air reception or via an MVPD, could require significant fact finding. The statute provides that the Commission shall grant an extension "for any station that requests such extension" if the Commission finds that the statutory conditions are met. This language could be read to require the station seeking an extension to provide the necessary information to justify the extension under one or more of the statutory criteria. The legislative history of Section 309(j)(14), however, suggests that the conferees contemplated that the Commission would perform its own analysis and conduct a consumer survey to determine whether the criteria specified in 309(j)(14)(B)(ii)(converter technology test) or 309(j)(14)(B)(iii)(15 percent test) apply in the market. The Conference Report states:

> In addition, the conferees recognize that this analysis [under 309(j)(14)(B)(iii)] will impose additional burdens on the Commission. Consequently, the conferees expect that the Commission will pursue this analysis only if it first concludes that a station does not qualify for an extension under the network digital television broadcast test or the converter technology test.
>
> In establishing the requirements for the 15 percent test, the conferees sought to establish objective criteria that could be determined by "yes" or "no" answers obtained from consumers surveyed in the relevant market. The conferees expect that the Commission will perform its own analysis, and that it will base this analysis of both the converter technology test and the 15 percent test on statistically reliable sampling techniques. A broadcast television licensee requesting the extension and other interested parties are to be afforded an opportunity to submit information and comment on the Commission's analysis with respect to those tests.[128]

[126] Conference Report at 577.

[127] *See id.* ("a television household must receive at least one programming signal from each local television station broadcasting a digital television service signal in order not to be counted toward the 15 percent threshold").

[128] *Id*. at 577-578.

94. We request comment on the extent to which the Commission is required to conduct consumer surveys or otherwise obtain information to determine whether an extension is required under 309(j)(14)(B). In addition, we invite comment on the nature of any survey that must be performed, the type of questions that should be included, and the percent of the television households in the market that must be included in the sample. Is it necessary to survey each market separately, or would a more wide-spread survey suffice to establish that a market meets one or more of the criteria for grant of an extension request? If the first survey conducted demonstrates that an extension is warranted, when should a new survey be performed to see if there has been further transition progress in the market?

I. DTV Labeling Requirements and Consumer Awareness

95. As the transition proceeds and accelerates for the industry participants, it becomes increasingly important to focus on consumer impact. A recent report to Congress by the General Accounting Office found that more than 95% of the 28 million television sets that were sold in the U.S. in 2001 were analog-only sets.[129] When the transition ends, consumers with analog-only sets will be unable to continue receiving over-the-air broadcast television without use of an external digital tuner or converter. The GAO Report also found that at least 40% of the public is unfamiliar with the digital transition[130] and 68% of those surveyed did not know that current analog televisions would require a converter box to keep working after the transition is complete.[131] Further, only 14% of those surveyed by the GAO were "very familiar" with the difference between analog and digital televisions.[132]

96. In the first DTV periodic review proceeding, we sought comment on whether manufacturers were producing or planning to produce digital television receivers that would be able to receive digital format transmissions via cable, but that would not be capable of receiving digital broadcast signals over the air. We asked whether we should require digital television equipment that cannot receive over-the-air digital broadcast signals to carry a label informing consumers of this limitation on the receivers' functionality.[133] Commenters responding to the further notice of proposed rulemaking in that proceeding suggested that the Commission should revise the labels it currently requires for DTV receivers marketed as "Digital Cable Ready 1, 2, or 3,"[134] to state, in addition, that they "will not receive over-the-

[129] *See* "TELECOMMUNICATIONS: Additional Federal Efforts Could Help Advance Digital Television Transition," General Accounting Office Report, GAO-03-7, November 2002, ("GAO Report") at 17. *See also First DTV Periodic Review Second Report and Order,* 17 FCC Rcd at 15994-5, ¶ 34.

[130] GAO Report at 15.

[131] GAO Report at 16.

[132] GAO speculates that even this number may be high, since consumers may be confusing current digital television services provided by cable or satellite with DTV. GAO Report at 16 and note 12.

[133] *See First DTV Periodic Review Report and Order*, 16 FCC Rcd at 5986, ¶ 111.

[134] *See Compatibility Between Cable Systems and Consumer Electronics Equipment*, Report and Order, 15 FCC Rcd 17568 (2000). The Commission is considering a voluntary labeling regime and consumer disclosure requirements in connection with regulatory proposals made by members of the consumer electronics and cable television industries in a joint Memorandum of Understanding on a national "plug and play" standard for integrated, unidirectional digital cable television receivers and other unidirectional digital cable products. *Commercial Availability of Navigation Devices and Compatibility Between Cable Systems and Consumer Electronics Equipment***,** Further Notice of Proposed Rulemaking, CS Docket No. 97-80 and PP Docket No. 00-67, FCC 03-3 (rel. Jan. 10, 2003).

air broadcast signals."[135] In the *First DTV Periodic Review Second Report and Order*, we required that all TV receivers with screen sizes greater than 13 inches manufactured in the U.S. after July 1, 2007 be capable of receiving DTV signals over-the-air.[136] After reviewing the comments on labeling in the proceeding, we decided not to require television receivers that cannot receive over-the-air digital broadcast signals to carry a label informing consumers of this limitation.[137] Rather, we determined that we would continue to monitor the state of the marketplace and would take additional steps if necessary to protect consumers' interests.[138]

97. As part of our commitment to continue monitoring the marketplace, we seek further comment on whether manufacturers are producing or plan to produce digital television receivers that can receive digital format transmissions via cable or satellite but that cannot receive digital broadcast signals over the air. We also seek information on the number of "pure monitors" (without any tuner) intended for use in display of signals from video service providers that are currently produced or planned for production. Do equipment manufacturers plan to label such equipment to describe the reception limitations or need for additional receiving equipment? What is the potential for consumer confusion in connection with these devices? Should we require labeling on pure monitors that can be used to display video services, which neither receive off-air signals, nor are designed to be "digital cable ready," to advise consumers that the monitor cannot function to receive programming unless it is attached to an off-air tuner, or cable, or satellite receiver? Should we require labeling on digital television receivers that are not "digital cable ready" to indicate that the set "will not receive cable or satellite programming without the use of a converter"? We seek comment on these and other labeling options, as well as the need for and costs of such required disclosures.

98. In addition, we seek comment on whether the Commission should require a disclosure label on analog-only sets to inform consumers that a converter or external DTV tuner will be needed to ensure reception of television broadcast signals after stations in the consumer's market complete conversion to digital-only broadcasting. For example, we could require that all new analog sets display a label stating that "when broadcasters switch to digital broadcasting, this set will not receive or display television signals without the use of a converter." Where should the label be placed? Should there be additional point-of-sale disclosures? Should we require retailers to provide consumers with a digital conversion fact sheet with the purchase of all new television equipment? We seek comment generally on whether the Commission should implement labeling or notice requirements of any type for consumer television equipment to assist the transition and protect consumers. Finally, we seek comment on the Commission's authority to adopt any of the above labeling requirements. For instance, we seek comment on whether the Commission's authority could be derived from sections 1, 4(i), 303(r), 303(s), 336, 624A, or any other sections of the Communications Act.

J. Distributed Transmission Technologies

99. In the *First DTV Periodic Review Report and Order* we addressed comments requesting that the Commission adopt rules for on-channel DTV boosters, including an allowance for a distributed transmission system, but deferred consideration of distributed transmission techniques until we could

[135] *See* Comments of MSTV/NAB/ALTV filed in MM Docket No. 00-39 (filed April 6, 2001).

[136] *First DTV Periodic Review Second Report and Order,* 17 FCC Rcd at 15996, ¶ 40.

[137] *Id.*, ¶ 59.

[138] *Id.*

address the issue in a more comprehensive manner.[139] Commenters have defined distributed transmission as being similar to a cellular telephone system in that a service area is divided into a number of cells, each served by its own transmitter.[140] Distributed transmission differs from a cellular telephone system in that all adjacent cells use the same frequency (a "single-frequency network").[141] DTV boosters retransmit the primary DTV station's programming on the same channel. The viability of DTV boosters will depend upon the adequate performance of existing DTV receiver circuitry known as an "adaptive equalizer." This circuitry enables DTV receivers to treat signals from multiple transmitters as echoes of one another and these echoes can, within certain limiting parameters, be cancelled and/or combined to produce a single signal. If not eliminated, the echoes would result in interference and degradation of the quality of the received signal.

100. An essential prerequisite for a workable system is that all of the signals being received simultaneously must originate from transmitters that are radiating signals in which the symbol codes are arranged in the same order for the same data input, *i.e.*, the signals must be coherent.[142] One approach to harmonizing the transmitters within a system would be to feed them all from a single modulator, thus providing them with identical data input streams. The modulator output could be delivered to each transmitter via a transport system (*e.g.* microwave link) or over the air, where it could be converted to the necessary channel, amplified and transmitted. This approach has various inherent drawbacks, including the effects of propagation delay along the feed system and, for transmitters fed from over the air signals, signal feedback problems. Another approach to harmonizing transmitters could involve separate modulators at each transmitter which are synchronized from a common source, *i.e.*, synchronizing signals are added to the output from a common service multiplexer and delivered via a digital transport system to each transmitter, where they are decoded and used to produce identical bit streams from all transmitters.

101. Primary vs. secondary status. We have received comments suggesting that the Commission should grant primary status to the multiple transmitters in distributed transmission systems and license them under Part 73 of the rules, as opposed to treating them similarly to LPTV, translator, and booster stations.[143] We seek comment on the implications of granting primary status to DTV boosters in distributed transmission systems, and on whether we should license some categories of such stations with primary status. We are particularly interested in comments on the impact of primary DTV boosters on existing secondary LPTV and TV translator stations. Should some protection be afforded these secondary stations? What impact would primary DTV boosters have on the future availability of channels for secondary analog or digital LPTV or TV translator stations? How important are distributed transmission systems likely to be in facilitating the transition to DTV? Is primary status an essential part of distributed transmission systems?

102. Location and service area. Currently, all analog TV boosters must be located and must have a service area contained within the Grade B contour of the associated full service station. Should an

[139] *First DTV Periodic Review Report and Order*, 16 FCC Rcd at 5971, ¶¶ 62-63.

[140] *See* comments filed in response to the *Notice of Proposed Rule Making* in MM Docket No. 00-39, including those of the Merrill Weiss Group ("Weiss").

[141] *Id.*

[142] *See* Weiss Docket No. 00-39 comments at 22.

[143] Letter from Valerie Schulte, NAB, to Rick Chessen, Associate Bureau Chief, Media Bureau (June 7, 2002). We intend to address the issue of DTV boosters licensed under Part 74 in a separate proceeding.

equivalent requirement be established for DTV boosters used as part of a distributed transmission system? Should there be different a requirement if DTV boosters used in conjunction with a distributed transmission system are given primary status?

103. Power, antenna height and emission mask. If multiple DTV booster stations can be used to replace, or significantly augment, a single central transmitter in a distributed transmission system, what maximum or minimum limitations, if any, should be placed on the power and/or antenna height used at each DTV booster? Should such boosters be limited to the power values specified for digital LPTV stations? What emission mask would be appropriate for DTV boosters in a distributed transmission system? Are there identifiable categories of DTV booster stations that could be allowed to meet less strict mask requirements?

104. Interference protection. What standards are needed to protect distributed transmission systems from interference and how should those standards be calculated and applied? Should protection accrue to each DTV booster's service area or to the aggregate service area from all boosters? What standards are needed to protect other stations from interference from boosters in a distributed transmission system and how should those standards be calculated and applied? Should interfering signals from distributed system boosters be aggregated and, if so, how?

105. Technical standards What standards would be appropriate for boosters in distributed transmission systems with respect to specific technical requirements, such as frequency tolerance, type certification of transmitters, control circuitry and performance measurements? Must technical and operational parameters be specified to assure that a distributed transmission system performs properly? What transmission standards should be set for such systems and how and when should these standards be developed, tested and implemented? What benchmarks are appropriate to determine that the system is performing as designed and what monitoring and measuring equipment and procedures are necessary in order to test, adjust and maintain distributed transmission system equipment in proper operating order?

106. We seek comment generally on whether the Commission should permit the deployment of distributed transmission systems. We ask commenters to specifically address the relevant rules and policies that would have to be put in place to permit distributed transmission systems, and any new or amended forms, policies and/or procedures that would be needed with respect to the Commission's current system for filing, processing and granting television station licenses.

K. DTV Public Interest Obligations

107. Both Congress and the Commission have recognized that digital television broadcasters have an obligation to serve the public interest. Congress established the statutory framework for the transition to digital television in the 1996 Act, making it clear that public interest obligations would continue for broadcasters in the new digital world. In Section 336 of the Act, Congress stated that "[n]othing in this section shall be construed as relieving a television broadcasting station from its obligation to serve the public interest, convenience, and necessity."[144] The Commission also reaffirmed

[144] 47 U.S.C. § 336(d). That section also provides: "In the Commission's review of any application for renewal of a broadcast license for a television station that provides ancillary or supplementary services, the television licensee shall establish that all of its program services on the existing or advanced television spectrum are in the public interest."

that "digital broadcasters remain public trustees with a responsibility to serve the public interest,"[145] and stated that "existing public interest requirements continue to apply to all broadcast licensees."[146] Under our current rules, commercial television broadcast station licensees must provide coverage of issues facing their communities, and place lists of programming used in providing significant treatment of those issues (issues/programs lists) in the station's public inspection files on a quarterly basis.[147] Licensees must also maintain in their station's public inspection files records that substantiate certification of compliance with the commercial limits on children's programming[148] and quarterly Children's Television Programming Reports (FCC Form 398) reflecting the licensee's efforts to serve the educational and informational needs of children.[149]

108. It is thus clear that DTV broadcasters must air programming responsive to their communities of license, comply with the statutory requirements concerning political advertising and candidate access, and provide children's educational and informational programming, among other things. What remains unresolved is how these obligations will apply in the digital environment, and whether they should be applied differently or otherwise adapted to reflect the enhancements available in digital broadcasting.

109. The Commission issued a formal Notice of Inquiry ("*NOI*") on DTV public interest obligations in December 1999,[150] followed by two Notices of Proposed Rulemaking in September 2000.[151] In the *NOI*, the Commission sought comment on several issues related to how broadcasters might best

[145] *Fifth Report and Order*, 12 FCC Rcd at 12810, 12811.

[146] *Fifth Report and Order*, 12 FCC Rcd at 12830.

[147] 47 C.F.R. § 73.3526(e)(11)(i).

[148] 47 C.F.R. § 73.3526(e)(11)(ii).

[149] 47 C.F.R. § 73.3526(e)(11)(iii). Television and radio broadcast station licensees must also maintain information in their public inspection files on applications, authorizations, citizens agreements, service contour maps, ownership reports, annual employment reports, written correspondence with the public on station operations, material related to Commission investigations or complaints, and certification that the licensee is complying with its requirements for local public notice announcements. *Id*. § 73.3526(e). In addition, broadcast licensees must maintain a separate file within the public inspection file concerning requests by political candidates for broadcast time on the station. *Id*. § 73.3526(e)(6).

[150] *Public Interest Obligations of TV Broadcast Licensees*, MM Docket No. 99-360, Notice of Inquiry, 14 FCC Rcd 21633 (1999). The NOI was guided by proposals and recommendations of the President's Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters ("Advisory Committee"). The Advisory Committee was comprised of a broad cross-section of interests, including "the commercial and noncommercial broadcasting industry, computer industries, producers, academic institutions, public interest organizations, and the advertising community." *See* Exec. Order No. 13,038, 62 Fed. Reg. 12.065 (1997). On December 18, 1998, the Advisory Committee submitted a report, which contained ten separate recommendations on the public interest obligations digital television broadcasters should assume. *See Advisory Committee on Public Interest Obligations of Digital Television Broadcasters, Charting the Digital Broadcasting Future: Final Report of the Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters* (1998) (*Advisory Committee Report*). The report is available at www.ntia.doc.gov/pubintadvcom/pubint.htm.

[151] *Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations*, MM Docket No. 00-168, Notice of Proposed Rulemaking, 15 FCC Rcd 19816 (2000) (*"DTV Public Interest Form NPRM*"); *Children's Television Obligations of Digital Television Broadcasters*, MM Docket No. 00-167, Notice of Proposed Rulemaking, 15 FCC Rcd 22946 (2000) ("*Children's DTV Public Interest NPRM*").

serve the public interest during and after the transition from analog to digital television. Among the areas of inquiry in the *NOI* were questions regarding how broadcasters might make information about how they serve the public interest more accessible to the public.[152]

110. The *DTV Public Interest Form NPRM* proposed that the Commission adopt rules regarding the disclosure of broadcasters' activities in the public interest, essentially putting the contents of the public file on the Internet to make it more accessible to viewers. In light of the concerns about disclosure expressed in the record of the *NOI*, the *NPRM* proposed to replace the issues/programs list with a standardized form and to enhance the public's ability to access information on a station's public interest obligations by requiring broadcasters to make their public inspection files available on the Internet.[153] It also sought comment on whether licensees should provide a narrative description on the standardized form of the actions taken to assess community programming needs and interests;[154] whether a licensee's community service activities should be considered in assessing whether the licensee has served the public interest;[155] and whether the Commission's tentative conclusion that the standard form need not be filed with the Commission was appropriate, given that such an approach differs from that taken in the children's television context.[156]

111. The *Children's DTV Public Interest NPRM* proposed clarifying broadcaster obligations under the Children's Television Act and related Commission guidelines in a digital television environment. This *NPRM* focused primarily on two areas: the obligation of television broadcast licensees to provide educational and informational programming for children, and the requirement that television broadcast licensees limit the amount of advertising in children's programs. It sought comment on how the current three-hour children's core educational programming processing guideline should be applied in light of the many possible ways broadcasters may choose to use their DTV spectrum;[157] whether the current preemption rules for core educational programming should be revised or adapted for the digital environment;[158] and whether steps should be taken to ensure that programs designed for children or families do not contain age-inappropriate product promotions that are unsuitable for children to watch.[159]

112. To date, the Commission has not issued any decisions in the *DTV Public Interest Form NPRM*, the *Children's DTV Public Interest NPRM*, or the *NOI*. Given the significant time that has passed since the comment periods in these proceedings were closed, we invite additional comment in those dockets in order to reflect more recent developments. Comments filed addressing issues in the *DTV Public Interest Form NPRM* (MM Docket No. 00-168), *Children's DTV Public Interest NPRM* (MM Docket No. 00-167), and *NOI* (MM Docket No. 99-360) proceedings should reference the docket numbers in those proceedings, not the docket number of this DTV periodic review proceeding, and should be filed in the

[152] *NOI*, 14 FCC Rcd at 21637, ¶ 9.

[153] *DTV Public Interest Form NPRM*, 15 FCC Rcd at 19817-19, ¶¶ 5-6.

[154] *Id*., 15 FCC Rcd at 19825-27, ¶¶ 21-24.

[155] *Id*., 15 FCC Rcd at 19827, ¶ 25.

[156] *Id*., 15 FCC Rcd at 19830, ¶ 33.

[157] *Children's DTV Public Interest NPRM*, 15 FCC Rcd at 22952-56, ¶¶ 14-24.

[158] *Id*., 15 FCC Rcd at 22956-57, ¶¶ 25-28.

[159] *Id*., 15 FCC Rcd at 22960-61, ¶¶ 35-37.

same time frame as comments in this periodic review proceeding.[160] We are particularly interested in those issues relating to the application of public interest obligations to broadcasters that choose to multicast (*e.g.*, the application of our children's television rules or the statutory political broadcasting rules in a multicast environment). We are also interested in whether our approach to multicast public interest obligations should vary with the scope of whatever final digital must-carry obligation the Commission adopts. Our goal is to bring these proceedings concerning the public interest obligations of broadcasters in the digital environment to conclusion promptly in order to provide certainty to broadcasters and the public as the digital television transition continues.

L. Other Issues

1. ATSC Standards

113. In the *First DTV Periodic Review Second Report and Order*, we revised our rules to specify that the August 7, 2001, version of the ATSC DTV standard A/53B should be used in place of the September 16, 1995, version originally adopted.[161] We also acknowledged the likelihood that there will be further improvements made to the DTV standards over time, and stated our intention to consider incorporation into our rules of proposed changes that reflect the kind of broad industry consensus developed through ATSC's standards-making procedures. Updating the rules to reflect improvements in the standard will benefit both the public and broadcasters by allowing broadcasters to make technical improvements in their service that will enhance the quality of DTV services they provide. We hereby seek comment on whether our rules should be further changed to reflect any revisions to the ATSC DTV standard A/53B since the August 7, 2001, version.

2. PSIP

114. In the *First DTV Periodic Review Second Report and Order*, we stated that we would seek comment on whether the Commission should adopt the ATSC A/65A Program System and Information Protocol ("PSIP") standard into our rules as part of the DTV periodic review process.[162] The PSIP standard provides several different types of information, including channel number identification to facilitate tuning and use of virtual channel numbering, captioning and v-chip features, and program listing and event descriptions. The Commission has recognized the utility that the ATSC PSIP Standard offers for both broadcasters and consumers.[163] We seek comment on both whether to require use of PSIP and

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[160] *See* ¶ 130, *infra*.

[161] *First DTV Periodic Review Second Report and Order*, 17 FCC Rcd at 16001, ¶ 50. We revised Section 73.682(d) of the rules to specify ATSC Doc. A/53B (ATSC Digital Television Standard, 7 Aug. 01), except for Section 5.1.2 ("Compression format constraints") of Annex A ("Video Systems Characteristics") and the phrase "see Table 3" in Section 5.1.1 Table 2 and Section 5.1.2 Table 4. *Id.* ¶ 51.

[162] *Id.* ¶ 55. In the interim we will continue to support and encourage the voluntary use of the PSIP specification by broadcasters and cable operators and its inclusion in consumer electronics equipment. We have included a reference to the ATSC PSIP Standard in Section 73.682(d) of the rules as a document that licensees may consult for guidance. Transport stream identifier ("TSID") assignments will be incorporated into our broadcast television station procedures in the near future. *See First DTV Periodic Review Report and Order*, 16 FCC Rcd at 5971, ¶ 61.

[163] The channel mapping protocols contained in the PSIP identification stream could resolve issues associated with digital channel positioning. *Carriage of Digital Television Broadcast Signals*, 16 FCC Rcd 2598, 2635 (2001) (petitions for reconsideration pending). *See also First DTV Periodic Review Second Report and Order*, 17 FCC Rcd at 16003, ¶ 55.

which aspects of PSIP should be adopted into our rules. If we decide not to require use of PSIP, it is, nevertheless, important to decide if some or all of the PSIP information set forth in ATSC A/65A must be used by those who voluntarily use PSIP. Likewise, are there certain aspects of the PSIP standard that should not be used or required?

115. We seek comment on whether to require broadcasters to include PSIP information with their digital broadcast signals. Is PSIP information essential for the proper functioning of receivers? For example, without PSIP channel numbering information, over-the-air viewers must "direct tune" to the digital station. "Direct tune" means knowing and selecting the over-the-air digital channel. Without PSIP, how could viewers tune to the multiple program streams of stations operating in the multicasting mode? With channel numbering information in the PSIP, viewers can tune to the familiar analog channel number, which will link them to the digital channel. If PSIP information is not used, will digital equipment function properly, or will some equipment search for information that is not provided in the signal and therefore fail to function as intended? For example, if one broadcaster chooses to transmit PSIP channel numbering information, the viewers would find that broadcast station, including the digital signal, using the analog channel number, while another broadcaster in the same market not using PSIP could only be tuned using two different numbers. Does this present a problematic inconsistency for equipment manufacturers, consumers or electronic program guide programmers?

116. We ask for additional comment concerning other information that can be included in the PSIP. Information concerning closed captioning, transport stream identification ("TSID"), viewership tracking data, second audio programming ("SAP"), video description, and other data may be in the programming stream itself. Is that information always in the program stream and in a consistent format? A broadcast station may take that information and construct its PSIP to serve as an index to facilitate access to the information. Do consumer electronic equipment manufacturers build equipment to search both the PSIP and the programming streams for this information? Or do some digital receivers search only in the programming stream or only in the PSIP? What happens if the information is not in the PSIP? Is there a compatibility problem between the broadcaster's construction of its signal and the digital equipment? Would a requirement that all broadcasters construct and transmit PSIP information resolve or avoid such problems? Or would such a requirement create an incompatibility between broadcast signals and digital equipment that does not search for PSIP information?

117. We seek comment on any other aspects of ATSC A/65A, if any, that may create difficulties if required. For example, the current ATSC PSIP standard attaches the assignment of "major channel number" values to a broadcaster's current NTSC RF channel number.[164] Will there be circumstances in which a broadcast station does not want to use its current NTSC RF channel number as its "major channel number" for PSIP purposes?[165] We seek comment on whether we should modify the ATSC PSIP standard in this regard to allow a licensee to revise its major channel number.

[164] "Program and System Information for Broadcast and Cable," Advanced Television Systems Committee, Doc. A/65A, *Rev. A to PSIP for Terrestrial Broadcast and Cable* ("ATSC A/65A"), Annex B, *Assignment of Major Channel Numbers for Terrestrial Broadcast in the U.S.* (May 31, 2000). Pursuant to this Annex, a broadcaster with, for example, an analog NTSC broadcast license for RF channel 13 and a digital ATSC RF channel assignment of 39 will use "major channel number" 13 for identification of the analog NTSC channel on RF channel 13, as well as the digital RF channel 39.

[165] For example, a broadcaster with an NTSC RF channel number assignment of 49 and an ATSC RF channel number of 12 may prefer to use its digital RF number 12 as its "major channel number."

118. Whether or not we ultimately decide to make the use of PSIP mandatory, we need also to determine whether to require adherence to the PSIP standards in the ATSC A/65A standard for broadcasters that use PSIP.[166] If a broadcast station decides to include PSIP information or if we require the use of PSIP to transmit information, should the requirement apply to all the types of information that ATSC requires in PSIP, or only a subset of them, such as the information concerning v-chip ratings, closed captioning, and channel numbering? For example, in the *First DTV Periodic Review Second Report and Order* the Consumer Electronics Association ("CEA") stated that while it believed that we should adopt the PSIP standard in its entirety in order to maximize the benefits to the public of DTV, we should at a minimum require broadcasters to transmit the System Information component of PSIP. Specifically, it stated that we should require transmission of the Master Guide Table (MGT), System Time Table (STT), Virtual Channel Table (VCT), and Service Location Descriptor at all times and transmission of the Content Advisory and Caption Service Descriptors when a program is rated or captioned.[167] We have attached as Appendix B to this Notice, a list of certain PSIP tables specified in ATSC A/65A. We seek specific comment on the necessity or desirability of requiring broadcasters and manufacturers to adhere to the ATSC A/65A requirements for PSIP. We also request information on the costs to broadcast stations to construct PSIP, as well as costs to equipment manufacturers and consumers to ensure that all digital equipment uses PSIP information.

3. Closed Captioning

119. We seek comment on whether there are additional actions the Commission should take to ensure the accessibility and functioning of closed captioning service for digital television. In the closed captioning rules for digital television receivers, we adopted standards to ensure that DTV receivers have consistently formatted caption data for which to search.[168] Section 79.1 of the Commission's regulations requires all video programming providers to deliver all closed captioning data intact in a format that can be recovered and displayed by decoders meeting the standards set out in Part 15 of our regulations.[169] Terrestrial broadcasters following EIA-708-B must include a caption service descriptor in the PMT of the program stream, and also in the EIT if using PSIP.[170] The caption service descriptor is defined by ATSC A/65A and provides information that supplements closed captioning information, such as closed captioning type and language codes for events with closed captioning service.[171] EIA-708-B only requires decoders to acquire caption service descriptors from one location and, therefore, decoders may acquire caption service descriptors from the EIT in the PSIP only.[172] We seek comment on whether this difference in requirements permits, or is likely to permit**,** a situation in which a broadcaster places all of its closed captioning information, including caption service descriptors, in the program stream, but a manufacturer builds its closed captioning equipment to acquire needed information from the PSIP? If this

[166] *See* ATSC A/65A (May 31, 2000).

[167] *See First DTV Periodic Review Second Report and Order,* 17 FCC Rcd at 16002-3, ¶ 54.

[168] *Closed Captioning Requirements for Digital Television Receivers*, 15 FCC Rcd. 16788 (2000) ("DTV Closed Captioning Order"); 47 C.F.R. § 15.122(b) (incorporating by reference EIA-708-B, "Digital Television (DTV) Closed Captioning," Electronic Industries Alliance (Dec. 1999) ("EIA-708-B")).

[169] 47 C.F.R. § 79.1(c).

[170] EIA-708-B, § 4.5.1 (Dec. 1999).

[171] *See* EIA-708-B, § 4.5 (Dec. 1999); ATSC A/65A, § 6.7.3 *Caption Service Descriptor* (May 31, 2000).

[172] EIA-708-B, § 4.5.4 (Dec. 1999).

occurs, what is the effect on closed captioning functionality?

120. In the *DTV Closed Captioning Order*, we believed that some manufacturers would choose to build their products to search for available PSIP data for captioning and other functions, but did not make PSIP a requirement.[173] The ATSC A/65A terrestrial broadcast standard requires the caption service descriptor to be in the PSIP and makes optional the presence of the caption service descriptor in the program stream.[174] If broadcasters and manufacturers were all to use PSIP, would that eliminate the situation described above in which decoders look for information where broadcasters have not put the information? We seek comment on whether we should adopt the provisions of the ATSC A/65A standard that require all digital television broadcasters to place the caption service descriptor in the PSIP. If we do so, how would this requirement interact with the requirements of EIA-708-B, Section 79.1 and Section 15.122?

4. V-Chip

121. We seek comment on whether the Commission needs to do more to ensure that v-chip functionality is available in the digital world. For example, the ATSC A/65A terrestrial broadcast standard requires that v-chip program rating information, when present, to be in the PSIP, and makes optional the presence of the rating information in the program stream.[175] Some broadcasters may be providing rating information in one or both of the methods described in the standard within their digital broadcast,[176] and may continue to do so in the future. We are concerned that without a specific requirement, broadcasters and equipment manufacturers will not follow a standard for broadcast of program rating information and that lack of compatibility between ratings information and equipment may in some instances result in the failure of the blocking functionality that the v-chip provides. Therefore, we seek comment on whether the Commission should adopt the provisions of the ATSC A/65A standard that requires all digital television broadcasters to place v-chip rating information in the PSIP. Is it necessary to likewise require equipment manufacturers to develop equipment that access program rating information in the PSIP, or are consumer electronics manufacturers already developing digital televisions that access program rating information in the PSIP or both locations?[177] What are the

[173] *DTV Closed Captioning Order*, 15 FCC Rcd at 16801, ¶ 36. Section 15.122 also specifies requirements for decoders relying on PSIP data to implement closed captioning. *See* 47 C.F.R. § 15.122(c)(2).

[174] ATSC A/65A, § 6.7 *Core Descriptors*, Table 6.16, (May 31, 2000).

[175] *Id.*

[176] Although the Communications Act requires all television receivers be equipped with technological features (v-chip) to enable program blocking when program rating information is sent by a broadcaster, we have refrained from promulgating regulations requiring delivery of the codes necessary for operation of the v-chip based upon the voluntary assumption of this responsibility by video program distributors. *Implementation of Sections 551(c), (d), and (e) of the Telecommunications Act of 1996: Technical Requirements to Enable Blocking of Video Programming Based on Program Ratings*, 13 FCC Rcd. 11248, 11259 (1998) ("V-chip Order"). *See also* 47 U.S.C. §§ 303(x), 330(c)(4).

[177] In the *V-chip Order*, we stated that we expected manufacturers to soon begin to design their televisions to accommodate the program ratings pursuant to the ATSC Standard A/65. Accordingly, we set a deadline for the inclusion of program blocking technology in all televisions by January 1, 2000. We did not specify that the A/65 standard was mandatory, but required digital televisions to react in a similar manner as analog televisions when programmed to block specific rating categories. 13 FCC Rcd. at 11258-11259, ¶¶ 25-29. *See also* 47 C.F.R. § 15.120.

advantages of having this information only in PSIP? Alternatively, if we do not adopt the ATSC A/65A terrestrial broadcast standard as it pertains to provision of v-chip program rating information, should we require carriage of this information in the program stream which is currently optional under ATSC A/65A? We note that CEA has filed a petition for rulemaking asking the Commission to incorporate standards EIA-766 and EIA-708-B into Section 15.120 of our rules in order to establish uniformity for v-chip compliance in digital receivers.[178] We seek comment on CEA's proposal, including the adoption of particular standards that are necessary and appropriate, and the timing of any such mandate. The PSIP also carries the Rating Region Table ("RRT"), which describes the content advisory rating system being used.[179] Use of the RRT would support future modifications to the content advisory rating system. We generally believe that the ability to modify the content advisory system is beneficial, and seek comment on whether and how the Commission should ensure that such flexibility is maintained in any standard it adopts. Under the ATSC A/65A standard, the RRT is not carried in the program stream. If we do not require broadcasters to use PSIP, how will the information contained in the RRT be conveyed to television receivers?

122. The CEA petition asks the Commission to apply v-chip rules only to 16:9 aspect ratio television receivers that are 7.8 inches or greater in height, a measurement comparable to a 13-inch analog receiver. With respect to the screen size to which the v-chip requirement applies, we note that the Commission has used the 7.8 inch reference in other contexts relating to digital receivers.[180] We seek comment on whether there is any reason to depart from that reference and use a different size standard for v-chip requirements. We also seek comment on whether the Commission should specify additional v-chip requirements for digital television receivers.

5. TV Translators

123. We also request comment on issues concerning the implications of PSIP for the operation of TV translator facilities. A TV translator rebroadcasts the programs and signals of a primary (full service) TV station, but on a different channel. The Commission intends to initiate a proceeding in the near future examining issues related to the authorization of digital translators and boosters. In the case of PSIP information, the channel number/frequency carried on a translator's primary station signal will be different from the channel on which the translator broadcasts. In order for DTV sets receiving service from a translator to function properly, the PSIP information on the signal needs to include the channel/frequency of the translator. When a DTV translator is paired with an analog translator, its PSIP information needs to include the channel of the analog translator as well. We request comment on how the proper PSIP information is to be provided on TV translator rebroadcasts and who will be responsible for ensuring that that information is so provided. We also request comment regarding the costs of providing PSIP information on TV translators as well as any other concerns that translator operators might have in

[178] *See Expedited Petition for Rulemaking*, filed in ET Docket No. 97-206, RM 9832 (Jan. 12, 2000) (A copy of this Petition for Rulemaking has been included in the docket of this proceeding). Matsushita Electric Corporation of America and Thomson Consumer Electronics, Inc. filed comments in support of CEA's petition.

[179] Without the information in the RRT, the program rating icons (e.g., TV-Y7 or PG-13) will be displayed, but the explanations of the icons may not.

[180] *See, e.g., First DTV Periodic Review Second Report and Order*, 17 FCC Rcd at 15996, ¶ 40 (adopting broadcast DTV tuner requirement to receivers measuring at least 7.8 inches vertically, and noting that approach was the same as the Commission adopted for inclusion of closed captioning capability in DTV receivers in ET Docket No. 99-254).

implementing PSIP on their DTV operations.[181]

6. DTV Station Identification

124. The Commission has received a number of inquiries from licensees asking about station identification requirements for DTV stations. Under our current rules, television stations are required to make station identification announcements at the beginning and end of each time of operation as well as hourly.[182] Official station identification may be made visually or aurally, and must consist of the station's call letters immediately followed by the community or communities specified in the station's license as the station's location.[183] Either or both the name of the licensee and the station's channel number may be inserted between the call letters and the station location, but no other insertion is permissible.[184]

125. In general, we propose to require digital television stations to follow the same rules for station identification as analog television stations. Recognizing that channel number identification is not currently required for all television stations by our rules, we ask whether channel identification should be required for DTV stations? If station identification announcements include channel numbers, we request comment on whether our rules should specify which channel number stations should use: the major (analog) channel number, minor (digital) channel number, or over-the-air channel number. Stations considering multicasting have raised concerns about separate identification of their separate digital programming streams for purposes of obtaining audience ratings. While we are not inclined to assign separate call signs for additional program streams for stations that choose to multicast, we propose to permit such stations to include additional information in their station announcements identifying each program stream. For example, stations could number their digital program streams (*e.g.*, "WXXX-DT Channel 7.1" and "WXXX-DT Channel 7.2," where 7 is the number of the station's analog channel) or provide other information in the station announcement identifying the program service (e.g., "WXXX-DT your WB network channel"). We invite comment generally on this approach and on the type of identifying information we should permit to be included in station identification announcements to distinguish among different program streams.

126. For stations simulcasting their analog programming on the digital channel, we propose to permit station identification announcements to be made simultaneously for both stations as long as the identification includes both call signs (*e.g.*, "WXXX-TV and WXXX-DT") if it is intended to serve as the identification for both stations.[185] Is such an approach during the transition advisable for television broadcasters? Alternatively, should stations be required to identify analog and digital stations separately?

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[181] We further note that a similar issue arises with cable service when a broadcast DTV signal or its associated analog signal is carried on a cable system on a channel that is different from its broadcast signal. PSIP in the context of cable carriage is a topic in the pending DTV Must Carry Proceeding, Docket No. 98-120.

[182] 47 C.F.R. § 73.1201(a).

[183] 47 C.F.R. § 73.1201(b). Digital television stations have been assigned the same call letters as their associated analog TV stations, except that the digital station is identified with the suffix "DT."

[184] *Id.* Television satellite stations must include in their station identification announcements the number of the channel on which each station is operating. 47 C.F.R. § 73.1201(c)(3)(i).

[185] Our rules currently allow co-owned AM/FM radio stations licensed to the same community simultaneously broadcasting the same programming on both stations to make joint station identification announcements for both stations. 47 C.F.R. § 73.1201(c)(2).

We invite comment on these proposals.

7. Satellite Stations

127. TV satellite stations are full power terrestrial broadcast stations authorized under Part 73 of the Commission's Rules to retransmit all or part of the programming of a parent station that is typically commonly owned. The Commission first authorized TV satellite operations in small or sparsely populated areas, which were deemed to have economic bases insufficient to support stand-alone, full-service operations.[186] The Commission later authorized satellite stations in larger markets when the applicant demonstrated that the proposed satellite could not operate as a stand-alone, full-service station.[187] The Commission has also allowed a full-service station to convert to a satellite operation, upon a showing that the community no longer has a sufficient economic base to support a full-service operation.[188] Because satellite stations, by definition, operate in small or sparsely populated areas which have insufficient economic bases to support full- service operations, we seek comment on whether the public interest would be served by allowing such stations to turn in their digital authorization and "flash-cut" to DTV transmission at the end of the transition period. We request comment on the advantages and disadvantages of granting this special designated status to satellite stations, specifically whether it will hinder the overall transition to digital television and harm viewers by delaying their access to digital signals, or whether disallowing such status will overly burden satellite stations financially.

128. We also invite comment on whether allowing satellite stations to "flash-cut" to digital would present legal impediments to satisfying 309(j)(14). Could a satellite station broadcasting the programming of a top-four TV network be considered a station "licensed to or affiliated with" a top-four TV network under Section 309(j)(14)(B)(i), thus requiring that the satellite be broadcasting in digital before analog service is required to cease in the market? Or should we consider only whether a top-four TV network's non-satellite affiliate in the market is broadcasting in digital? We note that we have proposed to interpret Section 309(j)(14)(B)(i) to require that all stations in the market licensed to or affiliated with a top-four TV network be broadcasting in digital before analog service must cease in the market, even if a top-four network has more than one affiliate in the market.[189] If allowing all satellite stations to "flash-cut" could delay the transition indefinitely in certain markets under Section 309(j)(14)(B), an alternative would be to permit satellite stations to apply to "flash-cut" on a case-by-case basis. We invite comment on this approach.

V. ADMINISTRATIVE MATTERS

129. *Ex Parte Rules*. This is a permit-but-disclose notice and comment rulemaking proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided that they are disclosed as provided in the Commission's Rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).

130. *Comment Information*. Pursuant to Sections 1.415 and 1.419 of the Commission's rules,

[186] *See, e.g.*, *Authorization of UHF Stations*, 43 FCC 2734 (1954).

[187] *Suburban Broadcasting Corp*., 83 FCC 2d 359, 365-66 (1980).

[188] *See, e.g., Central Minnesota Television, Inc*., 2 FCC Rcd 6730 (1987); *Television Satellite Stations*, 6 FCC Rcd 4212, 4213-4214 (1991) (subsequent citations omitted).

[189] *See* discussion of Section 309(j)(14)(b)(i), *supra*, section H.

47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before **April 14, 2003**, and reply comments on or before **May 14, 2003**. Comments filed addressing issues in the *DTV Public Interest Form NPRM* (MM Docket No. 00-168), *Children's DTV Public Interest NPRM* (MM Docket No. 00-167), and *NOI* (MM Docket No. 99-360) proceedings should also be filed by these dates and should reference the docket numbers in those proceedings, not the docket number of this DTV periodic review proceeding. Commenters wishing to address both public interest issues and other issues raised in the DTV periodic review should put their public interest comments in a separate document to be filed in the appropriate public interest docket(s) and file their comments on other issues raised in the periodic review in the docket number of this proceeding (MB 03-15; RM 9832). Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998). Accessible formats (computer diskettes, large print, audio recording and Braille) are available to persons with disabilities by contacting Brian Millin, of the Consumer & Governmental Affairs Bureau, at (202)418-7426, TTY (202) 418-7365, or at bmillin@fcc.gov.

131. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers are referenced in the caption of the comments, 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, U.S. 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. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appear in the caption of the comment, commenters must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Vistronix, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

132. *Initial Paperwork Reduction Act Analysis*. This *Notice of Proposed Rulemaking* ("Notice") may contain either proposed or modified information collections subject to the Paperwork Reduction Act of 1995. As part of our continuing effort to reduce paperwork burdens, we invite OMB, the general public, and other Federal agencies to take this opportunity to comment on the information collections contained in this *Notice*, as required by the Paperwork Reduction Act of 1995. Public and agency comments are due at the same time as other comments on the *Notice*. 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 shall have practical utility; (b) ways to enhance the quality, utility, and clarity of the information collected; and (c) 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. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, 445 Twelfth Street, S.W., Room C-1804, Washington, DC 20554, or via the Internet to jboley@fcc.gov and to Kim Johnson, OMB Desk Officer, 10236 NEOB, 725 17th Street, NW, Washington, DC 20503 or via the Internet to Kim A. Johnson@omb.eop.gov.

133. *Regulatory Flexibility Act*. As required by the Regulatory Flexibility Act,[190] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the proposals addressed in this *of Proposed Rulemaking*. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the Notice, and they should have a separate and distinct heading designating them as responses to the IRFA.

134. *Additional Information*. For additional information on this proceeding, please contact Kim Matthews, Policy Division, Media Bureau at (202) 418-2154, or Peter Corea, Policy Division, Media Bureau at (202) 418-7931.

VI. ORDERING CLAUSES

135. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 4(i) & (j), 303, 307, 309 and 336 of the Communications Act of 1934 as amended, 47 U.S.C. §§ 154(i) & (j), 303, 307, 309 and 336, this Notice of Proposed Rule Making IS ADOPTED.

136. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.[191]

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

[190] *See* 5 U.S.C. § 603.

[191] *See* 5 U.S.C. § 603(a).

APPENDIX A
INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act of 1980, as amended ("RFA"),[192] the Commission has prepared this Initial Regulatory Flexibility Analysis ("IRFA") of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rulemaking ("Notice"). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided above in paragraph 130. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[193] In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.[194]

A. Need for and Objectives of the Proposed Rules. As described in the Notice, the proposed rules are required to ensure a smooth transition of the nation's television system to digital television. Beginning in 1987, the Commission undertook to bring the most up-to-date technology to broadcast television. That resulted in several Commission decisions, including those adopting a digital television (DTV) standard, DTV service rules, and a Table of DTV Allotments. The Table of DTV Allotments provides each existing television broadcaster with a second channel on which to operate a DTV station for the transition period, after which one of its channels will revert to the government for use in other services. The transition deadline established by Congress is December 31, 2006. The Commission is permitted to extend that deadline for any station in a market if one or more of three conditions exist, including if more than 15 percent of viewers will be left without service from 1) a digital television receiver; 2) an analog television receiver equipped with a digital/analog converter; or 3) a multi-channel video provider that carries local broadcast stations. We have specifically invited comment on: (1) establishing deadlines for channel election, service replication and maximization for in-core channels; (2) interference protection for out-of-core channels; (3) how to revise the simulcasting requirements; (4) how to determine whether a particular market meets the digital service requirements necessary for the return of analog spectrum; (5) whether to allow certain technologies to be used to supplement digital transmissions; and (6) whether to require broadcasters and equipment manufacturers to follow uniform engineering standards.

137. *Additional Considerations and Requests for Comment.* The Commission issued two Notices of Proposed Rulemaking on DTV public interest obligations in September 2000.[195] The *DTV Public Interest Form NPRM* proposed that the Commission adopt rules regarding the disclosure of broadcasters' activities in the public interest, essentially putting the contents of the public file on the Internet to make it more accessible to viewers. The *Children's DTV Public Interest NPRM* proposed

[192] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[193] *See* 5 U.S.C. § 603(a).

[194] *See id.*

[195] *Standardized and Enhanced Disclosure Requirements for Television Broadcast Licensee Public Interest Obligations*, MM Docket No. 00-168, Notice of Proposed Rulemaking, 65 Fed. Reg. 62683, (2000) *(DTV Public Interest Form NPRM)*; *Children's Television Obligations of Digital Television Broadcasters*, MM Docket No. 00-167, Notice of Proposed Rulemaking, 65 Fed. Reg. 66951 (2000) (*Children's DTV Public Interest NPRM*).

clarifying broadcaster obligations under the Children's Television Act and related Commission guidelines in a digital television environment. Given the time that has passed since the comment periods in the *DTV Public Interest Form NPRM*, and the *Children's DTV Public Interest NPRM*, the Commission has invited additional comments in those dockets in order to reflect more recent developments.[196] Both previous NPRMs contained IRFAs.[197]

B. Legal Basis. The authority for the action proposed in this rulemaking is contained in Sections 4(i) & (j), 303, 307, 309 and 336 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i) & (j), 303, 307, 309 and 336.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply. The RFA 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.[198] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental entity."[199] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[200] 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").[201]

In this context, the application of the statutory definition to television stations is of concern. 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 therefore might be over-inclusive.

An additional element of the definition of "small business" is that the entity must be independently owned and operated. It is difficult at times to assess these criteria in the context of media entities and our estimates of small businesses might therefore be over inclusive.

Television Broadcasting. The proposed rules and policies could apply to television broadcasting licensees, and potential licensees of television service. The Small Business Administration defines a

[196] *See Notice* ¶ 112, *supra.*

[197] *DTV Public Interest Form NPRM*, 65 Fed. Reg. at 62688; *Children's DTV Public Interest NPRM*, 65 Fed. Reg. at 66958.

[198] 5 U.S.C. § 603(b)(3).

[199] 5 U.S.C. § 601(6).

[200] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). 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 Small Business Administration 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."

[201] 15 U.S.C. § 632.

television broadcasting station that has no more than $12 million in annual receipts as a small business.[202] Television broadcasting consists of establishments primarily engaged in broadcasting images together with sound, including the production or transmission of visual programming which is broadcast to the public on a predetermined schedule.[203] Included in this industry are commercial, religious, educational, and other television stations.[204] Also included are establishments primarily engaged in television broadcasting and which produce programming in their own studios.[205] Separate establishments primarily engaged in producing programming are classified under other NAICS numbers.[206]

There were 1,509 television stations operating in the nation in 1992.[207] That number has remained fairly constant as indicated by the approximately 1,686 operating television broadcasting stations in the nation as of September 2001.[208] According to Census Bureau data for 1997, there were 906 Television Broadcasting firms, total, that operated for the entire year.[209] Of this total, 734 firms had annual receipts of $ 9,999,999.00 or less, and an additional 71 had receipts of $10 million to $24,999,999.00.[210] Thus, under this standard, the majority of firms can be considered small.

Cable and Other Program Distribution. The SBA has developed a small business size standard

[202]13 C.F.R. § 121.201 (North American Industry Classification System ("NAICS") Code 513120).

[203]Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Subject Series – Source of Receipts, Information Sector 51, Appendix B at B-7-8 (2000).

[204]*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.

NAICS Code 513120, by its terms, supercedes the former SIC Code 4833, but incorporates the foregoing inclusive definitions of different types of television stations. *See* Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Subject Series – Source of Receipts, Information Sector 51, Appendix B at B-7-8 (2000).

[205]Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Subject Series – Source of Receipts, Information Sector 51, Appendix B at B-7 (2000).

[206]NAICS Code 512110 (Motion Picture and Video Production); NAICS Code 512120 (Motion Picture and Video Distribution); NAICS Code 512191 (Teleproduction and Other Post-Production Services); NAICS Code 512199 (Other Motion Picture and Video Industries).

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

[208]FCC News Release, Broadcast Station Totals as of September 30, 2001 (rel. Oct. 30, 2001).

[209] Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Subject Series – Establishment and Firm Size, Information Sector 51, Table 4 at 49 (2000).

[210] *Id.*

for cable and other program distribution services, which includes all such companies generating $12.5 million or less in revenue annually.[211] This category includes, among others, cable operators, direct broadcast satellite ("DBS") services, home satellite dish ("HSD") services, multipoint distribution services ("MDS"), multichannel multipoint distribution service ("MMDS"), Instructional Television Fixed Service ("ITFS"), local multipoint distribution service ("LMDS"), satellite master antenna television ("SMATV") systems, and open video systems ("OVS"). According to Census Bureau data, there are 1,311 total cable and other pay television service firms that operate throughout the year of which 1,180 have less than $10 million in revenue.[212] We address below each service individually to provide a more precise estimate of small entities.

Cable Operators. 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.[213] We last estimated that there were 1,439 cable operators that qualified as small cable companies.[214] 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 1,439 small entity cable system operators that may be affected by the decisions and rules proposed in this *Notice*.

The Communications Act, as amended, also contains a size standard for a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate less 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."[215] The Commission has determined that there are 68,500,000 subscribers in the United States. Therefore, an operator serving fewer than 685,000 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.[216] Based on available data, we find that the number of cable operators serving 685,000 subscribers or less totals approximately 1,450.[217] 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.

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[211] 13 C.F.R. § 121.201 (NAICS Code 513220). This NAICS Code applies to all services listed in this paragraph.

[212] Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Subject Series – Establishment and Firm Size, Information Sector 51, Table 4 at 50 (2000). The amount of $10 million was used to estimate the number of small business firms because the relevant Census categories stopped at $9,999,999 and began at $10,000,000. No category for $12.5 million existed. Thus, the number is as accurate as it is possible to calculate with the available information.

[213] 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. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd. 7393 (1995).

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

[215] 47 U.S.C. § 543(m)(2).

[216] 47 C.F.R. § 76.1403(b).

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

Direct Broadcast Satellite ("DBS") Service. Because DBS provides subscription services, DBS falls within the SBA-recognized definition of Cable and Other Program Distribution services.[218] This definition provides that a small entity is one with $12.5 million or less in annual receipts.[219] 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 that may be in excess of the threshold for a small business.[220] 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, despite the absence of specific data on this point, that there are entrants in this field that may not yet have generated $12.5 million in annual receipts, and therefore may be categorized as a small business, if independently owned and operated. Therefore, we will assume all four licensees are small, for the purpose of this analysis.

Home Satellite Dish ("HSD") Service. Because HSD provides subscription services, HSD falls within the SBA-recognized definition of Cable and Other Program Distribution services.[221] This definition provides that a small entity is one with $12.5 million or less in annual receipts.[222] 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.[223] 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.[224] As noted, *supra*, for the category Cable and Other Program Distribution, most of providers of these services are considered small.

Multipoint Distribution Service ("MDS"), Multichannel Multipoint Distribution Service ("MMDS") Instructional Television Fixed Service ("ITFS") and Local Multipoint Distribution Service ("LMDS"). MMDS systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the MDS and ITFS.[225] LMDS is a fixed broadband

[218] 13 C.F.R. § 121.201 (NAICS Code 513220).

[219] *Id.*

[220] *Id*.

[221] 13 C.F.F. § 121.201 (NAICS Code 513220).

[222] *Id.*

[223] *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming,* 12 FCC Rcd 4358, 4385 (1996) (*"Third Annual Report").*

[224] *Id.* at 4385.

[225] *Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, 10 FCC Rcd at 9589, 9593 (1995) ("*ITFS Order*").

point-to-multipoint microwave service that provides for two-way video telecommunications.[226]

In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues of less than $40 million in the previous three calendar years.[227] This definition of a small entity in the context of MDS auctions has been approved by the SBA.[228] The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas ("BTAs"). Of the 67 auction winners, 61 met the definition of a small business. In addition, MDS includes licensees of stations authorized prior to the auction. As noted, the SBA has developed a definition of small entities for pay television services, which includes all such companies generating $12.5 million or less in annual receipts.[229] This definition includes multipoint distribution services, and thus applies to MDS licensees and wireless cable operators that did not participate in the MDS auction. Information available to us indicates that there are approximately 850 of these licensees and operators that do not generate revenue in excess of $12.5 million annually. Therefore, using the SBA small business size standard, we find that there are approximately 850 small MDS providers.

The SBA definition of small entities for Cable and Other Distribution services, which includes such companies generating $12.5 million in annual receipts, seems reasonably applicable to ITFS.[230] There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business.[231] However, we do not collect annual revenue data for ITFS licensees, and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

Additionally, the auction of the 1,030 LMDS licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than $40 million in the three previous calendar years.[232] An additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding calendar years.[233] These regulations defining "small entity" in the context of LMDS auctions have been approved by the SBA.[234] There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses will include the 93 winning

[226] *See Local Multipoint Distribution Service,* 12 FCC Rcd 12545 (1997) ("*LMDS Order*").

[227] 47 C.F.R. § 21.961(b)(1).

[228] *See ITFS Order*, 10 FCC Rcd at 9589.

[229] 13 C.F.R. § 121.201 (NAICS Code 513220).

[230] *Id*.

[231] SBREFA also applies to nonprofit organizations and governmental organizations such as cities, counties, towns, townships, villages, school districts, or special districts, with populations of less than 50,000. 5 U.S.C. § 601(5).

[232] *See LMDS Order,* 12 FCC Rcd at 12545.

[233] *Id.*

[234] *See* Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau (FCC) from A. Alvarez, Administrator, SBA (January 6, 1998).

bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

Satellite Master Antenna Television ("SMATV") Systems. The SBA definition of small entities for Cable and Other Program Distribution services includes SMATV services and, thus, small entities are defined as all such companies generating $12.5 million or less in annual receipts.[235] Industry sources estimate that approximately 5,200 SMATV operators were providing service as of December 1995.[236] Other estimates indicate that SMATV operators serve approximately 1.5 million residential subscribers as of July 2001.[237] The best available estimates indicate that the largest SMATV operators serve between 15,000 and 55,000 subscribers each. Most SMATV operators serve approximately 3,000-4,000 customers. Because these operators are not rate regulated, they are not required to file financial data with the Commission. Furthermore, we are not aware of any privately published financial information regarding these operators. As noted, *supra*, for the category Cable and Other Program Distribution, most of providers of these services are considered small.

Open Video Systems ("OVS"). Because OVS operators provide subscription services,[238] OVS falls within the SBA-recognized definition of cable and other program distribution services.[239] This definition provides that a small entity is one with $ 12.5 million or less in annual receipts.[240] The Commission has certified 25 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.

Electronics Equipment Manufacturers. Rules adopted in this proceeding could apply to manufacturers of DTV receiving equipment and other types of consumer electronics equipment. The SBA has developed definitions of small entity for manufacturers of audio and video equipment[241] as well as radio and television broadcasting and wireless communications equipment.[242] These categories both include all such companies employing 750 or fewer employees. 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 utilize the SBA definitions applicable to manufacturers of audio and visual equipment and radio and television broadcasting and wireless communications equipment, since these are the two closest NAICS Codes

[235] 13 C.F.R. § 121.201 (NCAIS Code 513220).

[236] *See Third Annual Report*, 12 FCC Rcd at 4403-4.

[237] *See Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, 17 FCC Rcd 1244, 1281 (2001) ("*Eighth Annual Report*").

[238] *See* 47 U.S.C. § 573.

[239] 13 C.F.R. § 121.201 (NAICS Code 513220).

[240] *Id.*

[241] 13 CFR § 121.201 (NAICS Code 334310).

[242] 13 CFR § 121.201 (NAICS Code 334220).

applicable to the consumer electronics equipment manufacturing industry. However, these NAICS categories are broad and specific figures are not available as to how many of these establishments manufacture consumer equipment. According to the SBA's regulations, an audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.[243] Census Bureau data indicates that there are 554 U.S. establishments that manufacture audio and visual equipment, and that 542 of these establishments have fewer than 500 employees and would be classified as small entities.[244] The remaining 12 establishments 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. Under the SBA's regulations, a radio and television broadcasting and wireless communications equipment manufacturer must also have 750 or fewer employees in order to qualify as a small business concern.[245] Census Bureau data indicates that there 1,215 U.S. establishments that manufacture radio and television broadcasting and wireless communications equipment, and that 1,150 of these establishments have fewer than 500 employees and would be classified as small entities.[246] The remaining 65 establishments 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. We therefore conclude that there are no more than 542 small manufacturers of audio and visual electronics equipment and no more than 1,150 small manufacturers of radio and television broadcasting and wireless communications equipment for consumer/household use.

Computer Manufacturers. The Commission has not developed a definition of small entities applicable to computer manufacturers. Therefore, we will utilize the SBA definition of electronic computers manufacturing. According to SBA regulations, a computer manufacturer must have 1,000 or fewer employees in order to qualify as a small entity.[247] Census Bureau data indicates that there are 563 firms that manufacture electronic computers and of those, 544 have fewer than 1,000 employees and qualify as small entities.[248] The remaining 19 firms have 1,000 or more employees. We conclude that there are approximately 544 small computer manufacturers.

D. Description of Projected Reporting, Recordkeeping and other Compliance Requirements. At this time, we do not expect that the proposed rules would impose any significant additional recordkeeping or recordkeeping requirements. While the requirements proposed in the Notice

[243] 13 CFR § 121.201 (NAICS Code 334310).

[244] Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Industry Series – Manufacturing, Audio and Video Equipment Manufacturing, Table 4 at 9 (1999). The amount of 500 employees was used to estimate the number of small business firms because the relevant Census categories stopped at 499 employees and began at 500 employees. No category for 750 employees existed. Thus, the number is as accurate as it is possible to calculate with the available information.

[245] 13 C.F.R. § 121.201 (NAICS Code 513220).

[246] Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Industry Series – Manufacturing, Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, Table 4 at 9 (1999). The amount of 500 employees was used to estimate the number of small business firms because the relevant Census categories stopped at 499 employees and began at 500 employees. No category for 750 employees existed. Thus, the number is as accurate as it is possible to calculate with the available information.

[247] 13 C.F.R. § 121.201 (NAICS Code 334111).

[248] Economics and Statistics Administration, Bureau of Census, U.S. Department of Commerce, 1997 Economic Census, Industry Series – Manufacturing, Electronic Computer Manufacturing, Table 4 at 9 (1999).

could have an impact on consumer electronics manufacturers and broadcasters, such impact would be similarly costly for both large and small entities. We seek comment on whether others perceive a need for more extensive recordkeeping and, if so, whether the burden would fall on large and small entities differently.

E. 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 (among others): (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.[249]

The deadlines we proposed for replication and maximization for in-core channels would give the largest commercial stations in the largest markets on in-core channels three years to acquire necessary financing, develop business plans, and expand their digital service areas. Taking into consideration smaller-market commercial stations, smaller commercial stations in larger markets, and noncommercial DTV licensees, which may face greater obstacles in moving towards full replication or service maximization, we proposed alternative replication and maximization deadlines allowing close to the maximum time under the current statutory transition period to complete their replication and maximization facilities.[250] We welcome comment on modifications of the proposals if such modifications might assist small entities and especially if such are based on evidence of potential differential impact.

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

[249] 5 U.S.C. § 603.

[250] *See Notice* ¶ 33, *supra*. For DTV channels within the core spectrum, we propose to set new replication and maximization protection dates close to the end of the transition: for the top-four network affiliates (*i.e.,* ABC, CBS, Fox and NBC) in markets 1-100 - July 1, 2005; and for all other commercial DTV licensees as well as noncommercial DTV licensees - July 1, 2006.

APPENDIX B
LIST OF PSIP TABLES

ATSC A/65 requires the following tables to be included in the PSIP:

System Time Table (STT) - Provides a standard time and day in seconds to enable the receivers to display the program schedules and manage other operations such as converting the time according to the different time zones.

Rating Region Table (RRT) - Defines the different rating tables for different regions and countries and would be used to provide the complete explanation of the rating that's been assigned to a particular program. For example, the U.S. RRT would contain the MPAA ratings and TV Parental Guideline ratings. The ratings in the RRT are referenced by the content advisory descriptors in the EIT.

Master Guide Table (MGT) - Defines the attributes of all the remaining PSIP tables.

Terrestrial Virtual Channel Table (TVCT) - Provides tuning and navigation information for the different programs in the broadcast signal (e.g. major & minor channel numbers, TSID). It provides linkage to the EIT so that the scheduled events can be presented accordingly. The TVCT also can contain information that describes the broadcaster's associated analog channel.

Event Information Table (EIT) - Lists all available events for a 3-hour time segment for a particular virtual channel. A/65 requires that the current and next 3 EITs exist for each virtual channel (i.e. EIT-0 lists the current 3 hour segment, EIT-1, EIT-2 and EIT 3 list the next 9 hours of events). For example, EIT-0 would list the 12pm-3pm events; EIT-1 would list the 3pm-6pm events and so on. The STT (above) is needed to ensure that the correct EIT information is being associated with a program. Optionally, a broadcaster can choose to put in EITs all the way up to EIT-127. **Note:** The EITs also contain the AC-3 audio descriptor, caption service descriptor and content advisory descriptor for each event and are mandatory in the EIT. The caption service and content advisory descriptors may optionally be present in the PMT table associated with each television program.

The following table is optional under A/65:

Extended Text Tables (ETT) - Long text message describing the event.

The following two tables are part of an amendment to A/65 and are also optional:

Directed Channel Change Table (DCCT) - Carries information necessary to perform a channel change to be performed at a time specified by the broadcaster.

Directed Channel Change Selection Code Table (DCCST) - Permits a broadcast program categorical classification table to be downloaded for use by some Directed Channel Change Requests.

Separate Statement of
Commissioner Michael J. Copps

Re: Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital, MB Docket No. 03-15; RM9832; MM Docket Nos. 99-360, 00-167, 00-168

I am happy to support this effort to review the progress of and facilitate the country's transition to digital television. There is no question that DTV is the wave of the future: Congress has mandated the return of analog spectrum and the transition to digital broadcasting; this Commission and its Chairman are committed to moving the transition forward; and there are already some 800 stations across the country broadcasting digital signals.

While the transition still has a significant distance to travel, I am pleased that we have been making some real progress in recent months, with broadcaster and cable commitments to digital programming, Commission action looking to phase-in requirements for digital television tuners, and the industry's recent agreement on action to address cable compatibility issues. My sense is that we are moving faster now than we were a year ago.

In spite of all this progress, there has been a tremendous void – a glaring gap – covering the DTV transition. It is answering the question: What are the obligations of broadcasters in making sure that digital television, when it comes, will serve the public interest?

Today, we begin to fill that void with this proceeding. I am particularly pleased that we were able to reach consensus to refresh the record in the Commission's long-dormant proceedings on the public interest obligations of broadcasters in the DTV environment.

In March 1997, President Clinton ordered the creation of an Advisory Committee on the Public Interest Obligations of Digital Television Broadcasters, a group comprised of commercial and non-commercial broadcasters, producers, academics, representative of public interest organizations and the advertising community. In December 1998, the Advisory Committee submitted its report. That report contained ten separate recommendations on public interest obligations that digital television broadcasters could assume.

The Commission issued a formal Notice of Inquiry in December 1999, followed by two Notices of Proposed Rulemaking the next year. The NOI was guided by proposals and recommendations of the Advisory Committee, and sought comment on several issues related to how broadcasters might best serve the public interest during and after the transition from analog to digital television. The NPRMs sought more specific comment on two of the Advisory Committee's ideas. One was putting broadcasters' public files on the Internet, and the other concerned broadcaster obligations under the Children's Television Act.

Here, we take a stride towards calling the public interest issues forward and according them the high priority they deserve, and must have, if DTV is to serve the interests of the American people. I firmly believe that these issues deserve priority attention at the Commission. In the final analysis, these outstanding DTV public interest proceedings are many times more important than digital tuners and set-top boxes.

There are many questions that cry out for discussion and decision. I will reference only a few here. If a station carries programming that serves the needs of the community on one of its multicast

channels, has it met its obligation to serve the needs of its local community even if other multicast channels carry no such programming? Can a station carry its weekly three hours of children's programming exclusively on one multicast channel? How do statutory political broadcasting rules apply in a multicast environment? How, indeed, do we use this promising technology for the greater benefit of our people – ***all*** of our people?

In addition to ensuring that the public interest is served through digital television, clarifying DTV public interest obligations is also a matter of providing certainty to broadcasters so they can be about the job of planning how they will use this additional programming opportunity. The Commission has an obligation to the industry, as well as to the public, to complete action on these pending proceedings and to consider what other initiatives might be taken, given that more than two years have passed since much of anything has happened on this issue.

The opportunities of this digital medium are nothing short of spectacular in terms of innovation, encouraging localism and diversity, enhancing education, encouraging public discourse and strengthening our democracy. I thank my colleagues for joining me in bringing this discussion back to the fore, and I look forward to continuing to work with industry, consumer groups, my colleagues and others to bring them to conclusion. I strongly urge all stakeholders – that is, *all Americans* – to take part in this important discussion. These are hugely important months for broadcasting in America, particularly in the context of our ongoing broadcast ownership proceedings. The item before us today can help us set a course for television to truly serve the public interest as it deploys this promising new digital technology.

Separate Statement of
Commissioner Jonathan S. Adelstein

Re: Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital
MB Docket No. 03-15; RM9832; MM Docket Nos. 99-360, 00-167, 00-168

I fully support the Commission's efforts to review the progress of the digital transition. In facilitating that transition, the Commission's primary concern must be to protect the interests of the American consumer. Above all, we must ensure that the public continues to have access to free, over-the-air broadcasting in the digital world, so that broadcasting will remain the vital source of news, information, and programming for all Americans that it is today.

The digital age promises consumers a host of innovative services, from high definition programming with compact disc quality sound to ancillary data services. I support an aggressive but realistic deployment schedule to hasten the arrival of that digital promise. The Commission must do all it can to accelerate the availability of digital broadcast signals, stimulate demand for new digital equipment and programming, and permit the recovery of valuable spectrum currently allocated to broadcast service.

The Commission has a particularly significant role to play in defining broadcasters' public interest obligations in a digital world. Congress has made clear that the public interest obligations that originated in the analog era will carry over to the digital era, but we have yet to resolve precisely how those obligations will apply. I am pleased that the Commission has raised the public interest issues as part of its periodic review process, thereby reflecting the importance of these issues to a successful digital transition. I encourage parties to accept our invitation to refresh the records in the pending public interest proceedings and look forward to their prompt resolution.

Ultimately, a successful digital transition depends upon everyone working together to serve consumers. This will not be easy, as the history of this transition has often demonstrated. But I am encouraged by the constructive spirit I have seen on all sides since I joined the Commission. I look forward to working with industry, consumer groups, and others as we continue to chart a transition that is as rapid and smooth as possible for the American public.