Before the
Federal Communications Commission
Washington, DC 20554

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	)	WT Docket No. 99-168
Carriage of the Transmissions of Digital Television Broadcast Stations	)	CS Docket No. 98-120
Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television	)	MM Docket No. 00-83

MEMORANDUM OPINION AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: June 22, 2000 **Released: June 30, 2000**

Comment Date: August 16, 2000
Reply Comment Date: September 15, 2000

By the Commission: Commissioner Ness issuing a statement; Commissioners Furchtgott-Roth and Tristani approving in part, dissenting in part, and issuing separate statements.

I. INTRODUCTION AND EXECUTIVE SUMMARY

1. In the *700 MHz First Report and Order*, on reconsideration here, we adopted service rules for the commercial use of the 747-762 MHz and 777-792 MHz bands that enable the broadest possible use of this spectrum, consistent with sound spectrum management. In developing these rules, we were guided by our conclusion in our *Spectrum Reallocation Policy Statement*[1] that a flexible, market-based approach is the most appropriate method for establishing service rules for this band. In this *Memorandum Opinion and Order* and accompanying *Further Notice of Proposed Rulemaking*, we generally affirm the service rules we adopted in the *700 MHz First Report and Order*, provide additional guidance on the factors we will consider when reviewing applications for approval of voluntary agreements accelerating the transition of incumbent analog television licensees and opening these bands for new 700 MHz licensee use, and seek comment on several aspects of the spectrum clearing process.

2. The *Memorandum Opinion and Order* addresses thirteen petitions for reconsideration[2] seeking changes in service rules and auction procedures adopted in the *700 MHz First Report and Order* in this proceeding.[3] Consistent with the spectrum management policies

[1] Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium, *Policy Statement*, 14 FCC Rcd 19868 (1999) (*Spectrum Reallocation Policy Statement*).

[2] Petitions for Reconsideration were filed by Adaptive, APCO, ArrayComm, ALTV, FLEWUG, MSTV, NAB, Nelson Repeater Services, Northcoast Communications, Rand McNally, TRW, GPS Industry Council, and US WEST. The full names of petitioners and a list of parties filing oppositions and replies are listed in Appendix A. The late-filed petition for reconsideration submitted by FLEWUG is considered as an informal comment pursuant to Section 1.41 of the Commission's Rules.

[3] Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *First Report and Order*, 15 FCC Rcd 476 (2000) (*700 MHz First Report and Order*).

described in our *Spectrum Reallocation Policy Statement*,[4] and applied in the *700 MHz First Report and Order*, we affirm the paired spectrum band plan and out-of-band emission limits but revise certain of our technical rules to help establish a neutral regulatory scheme in which competing wireless technologies may contend. We anticipate that these revisions will expand participation in the auction, and increase the potential for new technologies and new service providers to use this spectrum intensively and efficiently to offer innovative wireless services. Specifically, we take the following actions:

- We remove the restriction on the operation of base stations in the lower band, and mobile, portable and control stations in the upper band. We also revise our power limits for fixed and base stations to better enable Time Division Duplex (TDD) technologies to operate on these bands. In light of these changes, we see no need to revise our original, mandatory pairing of lower-band and upper-band spectrum blocks.

- We affirm our decision in the *700 MHz First Report and Order* that this band's service rules should be oriented to intensive and efficient commercial wireless use, and also enable broadcast-type services that can satisfy the technical rules necessary for efficient overall use of spectrum. We also affirm our authority to consider and grant regulatory requests necessary to implement voluntarily negotiated agreements that would expedite the transition of incumbent analog television licensees from these frequencies. We find that voluntary clearing agreements between 700 MHz licensees and TV incumbents would generally advance the public interest and further the statutory scheme. We also provide guidance regarding our treatment of specific regulatory requests necessary to implement such voluntary arrangements. This additional guidance includes, *inter alia*, a presumption in favor of approving such regulatory requests in certain circumstances, and a recognition of the must-carry obligation of cable systems with regard to broadcasts of digital television programming. This guidance should provide greater certainty to potential bidders and incumbent broadcasters, which reflects our interest in facilitating the early clearance of incumbent broadcast stations on channels 59-69 through voluntary means. Voluntary agreements have the potential of facilitating both the provision of next-generation and Internet wireless services and the transition to DTV by these incumbent broadcast stations.

- In the *Further Notice of Proposed Rulemaking*, we seek comment on three aspects of the spectrum clearance process. First, we ask whether cost-sharing rules would assist in achieving the goals of clearing the 700 MHz band for new services and accelerating the transition to DTV or whether, as we tentatively conclude, cost-sharing arrangements should be left to negotiations among successful bidders. As a general matter, cost-sharing rules would require that, when a 700 MHz licensee reaches a voluntary agreement with a TV incumbent to clear its channel, other 700 MHz licensees benefiting from the agreement share in paying at least some portion of the compensation to the incumbent. Second, we seek comment on possible three-way voluntary relocation agreements involving new 700 MHz licensees, incumbent broadcasters in channels 59-69, and broadcasters with operations on lower channels, particularly those in the core spectrum (channels 2-51). Under such agreements, a broadcaster with an allotment on a lower channel would free up one of its channels for relocation by a broadcaster operating in channels 59-69. Finally, we seek comment on "secondary auctions." These auctions would allow incumbent television broadcasters to offer "options" for sale to new 700

[4] *Spectrum Reallocation Policy Statement*, 14 FCC Rcd at 19870 (para. 7).

MHz licensees, which would help incumbent broadcasters and 700 MHz licensees to reach mutually beneficial arrangements to help clear the spectrum and facilitate the transition to DTV.

3. By taking these steps, we seek to promote the broadest possible use of this spectrum, consistent with sound spectrum management and the Congressional mandate to auction this spectrum quickly.[5]

II. BACKGROUND

4. The *700 MHz First Report and Order* adopted a band plan and associated service rules for the assignment of licenses in 30 megahertz of the 700 MHz band (747-762 and 777-792 MHz).[6] We determined in the *700 MHz First Report and Order* that traditional television broadcasting and lower-powered wireless services could not effectively share these bands. We concluded that combining these technically disparate services on the same band would both constrain the effective use of the band, and create additional uncertainty and complexity for potential bidders' efforts to assess the usefulness of the band for specific service configurations. We did, however, permit other forms of broadcasting service on these 30 megahertz, provided they comply with the technical rules governing the 700 MHz band. We determined in the band plan to configure the 30 megahertz of spectrum in two paired bands: a 10 MHz band, designated Block C (747-752 and 777-782 MHz); and a 20 MHz band, designated Block D (752-762 MHz and 782-792 MHz).[7] Each paired band constitutes a spectrum block on which auction bids will be based, on a Economic Area Grouping (EAG) basis, as specified in the *700 MHz First Report and Order*. Power limits and out-of-band emission (OOBE) standards, as they affect operations by different wireless technologies within these bands, have been established by reference to the C and D blocks. Distinct, more stringent OOBE standards have been established to protect operations of adjacent public safety entities. In the *700 MHz First Report and Order,* we initially considered whether expansive inter-service flexibility, accommodating both conventional television broadcasting and wireless services, was practicable or would seriously compromise the intensity and efficiency of spectrum use. Based on our view of the constraints such sharing would impose on overall use of the band, we determined against such an approach. In subsequent sections of that Order we addressed several, more specific issues. Both the broad decision against sharing the band with television service, and the decisions intended to enable sharing of the band by divergent wireless technologies, are challenged by petitioners.[8]

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[5] *See* Pub. Law 106-113, 113 Stat. 1501, Appendix E, Section 213. *See also* 145 Cong. Rec. at H12494-94, H12501 (Nov. 17, 1999), "Making consolidated appropriations for the fiscal year ending September 30, 2000, and for other purposes." (*Consolidated Appropriations).*

[6] The Commission recently established service rules governing the other 6 megahertz of this allocation, the "guard bands." Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Report and Order*, FCC 00-90 (rel. Mar. 9, 2000) (*700 MHz Second Report and Order*).

[7] See 47 C.F.R. § 27.5.

[8] Petitioners who advocate continued use of the band for television service contend that allowing television service would enable more flexible use of spectrum, rather than precluding uses possibly desired by the public, and comports with the Commission's reallocation decision and Congressional instructions. These petitioners also assert that sharing between wireless and television services is technically achievable. *See, e.g.*, MSTV Petition at 5-10. Petitioners who challenge the technical rules intended to enable divergent

III. MEMORANDUM OPINION AND ORDER

A. TECHNICAL ISSUES

1. TDD Technologies

5. Adaptive, ArrayComm, TRW, and US WEST ask that we revise our technical and service rules set forth in the *700 MHz First Report and Order* to better enable the use of TDD technologies.[9]

a. Power Limits

6. **Background**. Adaptive, TRW, and US WEST contend that the power limits established in the *700 MHz First Report and Order*, which were specified for the upper and lower band segments rather than by reference to specific types of equipment (*i.e.*, fixed, mobile, and portable transmitters),[10] effectively preclude the deployment of base stations using TDD or other single-channel technologies in the upper of the two bands.[11] Motorola opposes application of the same power limits in both bands, asserting that doing so would increase the number of potential interference scenarios with respect to public safety operations and would also introduce additional interference scenarios between Frequency Division Duplex (FDD) and TDD-based systems.[12] BellSouth argues that under our current rules, interference could be caused to mobile receivers from high power transmissions from TV stations operating on Channels 59-56.[13] It indicates, however, that if base station receivers, which are capable of better filtering than mobile receivers and are therefore much better able to resist such interference, were permitted to receive on the 747-762 MHz bands,[14] there would be significantly less interference to commercial operations from adjacent-band TV stations. BellSouth therefore recommends 'flipping' the 700 MHz base/mobile allocations to require base transmit and mobile receive operations to be in the 777-792 MHz band, and mobile transmit and base receive operations to be in the 747-762 MHz band.

wireless technologies assert that certain of the service rules would actually preclude, or seriously burden, their single-channel technologies. *See, e.g.* ArrayComm Petition at 4-14.

[9] Rather than designate separate radio channels for directional transmission ("to" and "from" an individual user or base station), Time Division Duplex (TDD) transmission technology instead divides a single radio channel into many time slots. Any specific time slot may be used to transmit information either "to" or "from" the individual user or base station. A TDD system thus has the capability to modify, on a continuing, almost instantaneous basis, the allocation of such timeslots in order to reflect individual subscribers' usage patterns. Petitioners contend that because an entire channel is not dedicated to transmission in a specific direction, the TDD method uses spectrum more flexibly and efficiently. Adaptive Petition at 2-3; ArrayComm Petition at 7-8.

[10] *See 700 MHz First Report and Order*, Appendix B, § 27.50, 15 FCC Rcd at 547-48.

[11] Adaptive Petition at 4; TRW Petition at 5-9; US WEST Petition at 3-4.

[12] Motorola Opposition at 12. *But see* TRW Reply at 3.

[13] BellSouth Reply at 3. Currently, our rules specify that mobile stations transmit on spectrum in the 777-792 MHz band and receive on spectrum in the 747-762 MHz band.

[14] Currently, our rules specify that base stations transmit on spectrum in the 747-762 MHz band and receive on spectrum in the 777-792 MHz band.

7. **Discussion**. With regard to the service rules' effect on TDD-based services and technologies, we are persuaded that our current rules on power limits would inadvertently and unnecessarily limit the potential for new and innovative service offerings on these bands. As discussed below, we therefore revise the power limits applicable to base station operations.

8. The *700 MHz First Report and Order* adopted power limits that established the 30 watt ERP constraint on mobile, fixed, and control stations in the upper, 777-792 MHz band, while base and fixed stations in the lower band were allowed to utilize up to 1000 watts ERP. On reconsideration, we allow base, fixed, portable, mobile, and control stations on both the upper and lower bands, subject to the consistent application of the power limits already adopted for the various types of stations. As Adaptive correctly notes, we did not intend to restrict deployment of TDD or other single-channel technologies in these bands, as evidenced by the discussion in the *700 MHz First Report and Order* of such technologies.[15] We also agree with Adaptive and TRW that our service rules will be more technologically neutral if we establish power limits appropriate to each type of operation (fixed, mobile, and control stations), as we did in the rules for broadband PCS,[16] rather than designate the upper and lower bands for particular types of operations.[17] To the extent that interested parties seek to develop or expand TDD-based services into these bands, our power limits should not, however unintentionally, burden such innovative technology or services.

9. We find that such a change should not cause additional interference for public safety operations. While Motorola correctly notes that allowing either commercial base or mobile stations to operate on either band would result in an increase in the *number* of potential interference scenarios, Motorola has not provided any analysis indicating that, in fact, such an increase would cause greater overall interference to public safety operations. With regard to interference from mobile stations operating in the lower band, we conclude that our originally adopted OOBE standard is responsive to the potential "mobile-to-mobile" interference scenario[18] that already exists as a result of mobiles operating in the upper band, and will similarly protect public safety operations from harmful interference from lower band mobile transmissions. Likewise, although permitting base station operations in the upper band also raises the possibility of "base-to-mobile" interference into the 764-776 MHz public safety band, this interference condition should be addressed by the uniform 76 + 10 log P OOBE limit that is applied to fixed stations operating in the upper band.[19] Finally, although the revisions we make in our technical rules create various base-to-base and mobile-to-mobile interference scenarios between FDD and TDD licensees that would not arise if TDD were restricted, we note that Motorola has not argued that the 43 + 10 log P internal OOBE standard will not satisfactorily address these cases; nor have

[15] *700 MHz First Report and Order*, 15 FCC Rcd at 494 (para. 42).

[16] TRW Petition at 7-8. *See also* Adaptive Reply at 2-4.

[17] TRW states that we have not justified the "imposition of differing power limits in the two 700 MHz sub-bands on fixed service operations that will be essentially the same in both sub-bands." TRW Petition at 6.

[18] The "mobile-to-mobile" interference scenario would exist if commercial mobile transmissions cause interference to public safety mobiles attempting to receive on spectrum in the 764-776 MHz band.

[19] Fixed, control, and mobile stations are permitted to operate in the upper band, and at a maximum power level of 30 w ERP.

any potential 700 MHz licensees intending to operate FDD systems indicated any concern in this respect.

10. Accordingly, on reconsideration we revise Section 27.50 of our Rules to allow 1000 watt ERP base and fixed stations in both the lower and upper bands, and to allow 30 watt ERP mobile and control stations, as well as 3 watt ERP portables, in both the upper and lower 700 MHz bands.[20] These revisions will enable TDD-based technologies to use either the upper or lower bands, or both, as circumstances warrant. These revisions will also address the concerns raised by BellSouth with regard to potential interference to mobile receivers from TV stations operating on Channels 56-59 by allowing commercial licensees to use the upper band for "mobile receive" operations. We believe the altered rule will broaden the range of technologies and potential services represented in the auction process, and better enable the market to evaluate the asserted benefits of those technologies and services, without causing additional interference to public safety operations.

b. Paired Spectrum Bands

11. **Background**. ArrayComm raises a second issue: the mandatory pairing of spectrum bands.[21] The pairing of spectrum, ArrayComm contends, requires a bidder seeking to use TDD technology to purchase twice the spectrum its technology needs, and to incur the additional risk and uncertainty of reselling the unused spectrum block in the post-auction market.[22] ArrayComm asserts that, while the pairing of bands had a defensible "technical predicate" in the early stages of two-way wireless mobile services, because paired bands were essential to avoid self-interference in the duplex mode, to continue a mandatorily paired service structure when more efficient single-channel technologies have been developed is "counterproductive to technological advancement."[23] US WEST contends, however, that modifying the power limits is a more appropriate and measured means of enabling TDD-based services than eliminating the frequency pairings.[24]

12. **Discussion**. We have decided not to alter our determination to establish spectrum blocks and assign licenses consisting of paired bands. The upper and lower band spectrum blocks were initially established in the *Reallocation Report and* Order. The Commission's subsequent adoption in the *700 MHz First Report and Order*,[25] of a band plan and mandatory pairing of spectrum blocks for the assignment process, reflected an assessment that the most commonly-used transmission procedure for PCS, cellular, and other established mobile and fixed wireless applications, requires paired spectrum. Furthermore, we agree with US WEST's contention that modifying the power limits would be a better means for enabling TDD operations than

[20] In addition, we modify Sections 27.53 and 27.60 of our Rules appropriately to reflect these revisions.

[21] *700 MHz First Report and Order*, 15 FCC Rcd at 491-94 (paras. 35-42);Appendix B, § 27.5(b), at 543.

[22] ArrayComm Petition at 5-14.

[23] ArrayComm Petition at 6-7.

[24] US WEST Opposition at 9.

[25] *700 MHz First Report and Order*, 15 FCC Rcd at 494 (para. 42).

eliminating frequency pairing. Additionally, as the *700 MHz First Report and Order* noted, the majority of comments in the record favored the pairing of these bands.[26]

c. OOBE Standards

13. **Background**. The third issue, raised by ArrayComm, is whether the OOBE standards adopted to govern interference between adjacent commercial licensees operating within the 30 megahertz channels, sometimes referred to as "internal" OOBE standards, are sufficient to protect potential TDD-based applications on these bands.[27] ArrayComm argues that the internal OOBE standards adopted by the *700 MHz First Report and Order* implicitly accept the prospect of interference, because they are set at much lower levels than the external OOBE standards adopted to protect operations on adjacent public safety bands.[28] According to ArrayComm, the *700 MHz First Report and Order* fails to recognize that single-channel technologies are especially vulnerable to OOBE, and merit more stringent OOBE standards.[29]

14. **Discussion**. We affirm the internal OOBE limits we established in the *700 MHz First Report and Order*. On the record before us, we conclude that a modification of the internal, 43 + 10 log P out-of-band emission limit adopted in the *700 MHz First Report and Order* to protect commercial service operators from one another is not demonstrated to be necessary to protect TDD-based technologies.[30]

15. ArrayComm asks that we tighten this standard, and TRW and Adaptive similarly assert that the Commission should establish OOBE limits at levels now set for the public safety bands.[31] ArrayComm argues that the adoption of the more stringent 76 + 10 log P standard to protect public safety is an "implicit admission" that other, non-public safety users are likely to receive interference from the 43 + 10 log P emission mask, and adds that such interference will be more harmful where it involves dissimilar technologies.[32] ArrayComm argues that TDD technologies will be more vulnerable to FDD emissions than vice versa, because the TDD uplink and downlink share a single frequency block.[33] TDD advocates also assert that expanding the application of the OOBE standards adopted to protect public safety operations to provide greater protection of different commercial technologies will not significantly burden FDD-based services.[34]

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[26] *700 MHz First Report and Order*, 15 FCC Rcd at 494 (para. 42).

[27] Adaptive also discussed this OOBE issue in *ex parte* meetings with Commission staff. Adaptive *Ex Parte* filings of April 4 and 11, 2000.

[28] ArrayComm Petition at 14.

[29] ArrayComm Petition at 14-15.

[30] ArrayComm Petition at 14-15.

[31] TRW Opposition at 7-8.

[32] ArrayComm Petition at 15-16.

[33] ArrayComm Petition at 15-16.

[34] ArrayComm Petition at 15-16 .

16. We decline to make the changes recommended by petitioners. As an initial matter, petitioners have not provided any technical analysis demonstrating why the current 43 + 10 log P limit would not be sufficient to protect commercial TDD systems.[35] Furthermore, we note that the limits advocated by petitioners, those that we adopted to minimize interference to public safety bands, were adopted in direct response to a statutory mandate that public safety entities be particularly protected. While all licensees are entitled to protection from interference, we must take extra care with public safety licensees, as the statute *requires* such protection and any interference could potentially jeopardize the life-saving services facilitated by public safety operations in the 700 MHz band. Parties commenting on the matter of OOBE limits in the *700 MHz First Report and Order* proceeding expressed concern that establishing stringent OOBE limits to protect public safety would adversely affect commercial licensees' ability to utilize the 700 MHz spectrum, specifically indicating that a strict limit could prevent the deployment of wideband CDMA technologies.[36] In response to these concerns, we adopted limits aimed at protecting public safety without compromising the commercial viability of the 747-762 MHz and 777-792 MHz bands.[37]

17. We therefore conclude that to revise our technical standards in the manner sought by the TDD advocates would effectively limit technical systems that could operate in this band. Specifically, we find that the internal OOBE limits proposed by the TDD petitioners would seriously jeopardize the usefulness of the spectrum for other potential licensees operating on the 747-762 MHz and 777-792 MHz bands. Without a greater demonstration of the need for additional protection between TDD and other commercial licensees in this spectrum, we decline to revise our internal OOBE standards.[38] However, we do believe that users of TDD technology are entitled to protection from interference from adjoining bands. Thus, in the event that sufficient, valid evidence is presented supporting instances of interference, we would take action in an effort to minimize such interference.

2. Out-of-band and Spurious Emission Limits

18. **Background.** The *700 MHz First Report and Order* established several distinct out-of-band emission (OOBE) standards tailored to address specific interference management concerns. Certain of those limits are challenged by petitioners. We previously considered the

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[35] TRW provides an analysis that is intended to show the extent to which interference might be reduced if the stricter public safety OOBE limits were adopted. Specifically, TRW's analysis, which is based on various technical assumptions, indicates that if our 43 + 10 log P standard is employed, a typical broadband station operating on one of the commercial bands would require line-of-site separation of approximately 4.8 km from a broadband station operating on another commercial band in order to avoid interference; but that if the public safety OOBE limits were employed (*i.e.*, 76 + 10 log P) this separation distance would be reduced to about 430 meters. TRW Consolidated Comments/Opposition at 7-8. While we agree that required separation distances between stations could be reduced if we adopt more strict OOBE limits, we have no evidence in the record to suggest that any particular maximum separation distance between commercial stations is necessary to enable viable commercial operations. We therefore cannot agree with TRW's conclusion that adoption herein of the more stringent public safety OOBE limits are required.

[36] *See, e.g.,* US WEST and others, n.243 and n.250.

[37] *700 MHz First Report and Order,* 15 FCC Rcd at 519-20 (paras. 105-106).

[38] Elsewhere in this decision, we reiterate our commitment to encouraging new and innovative technologies and services. Thus, for example, we have revised our power limits to better enable TDD technologies to operate in the 700 MHz bands.

assertion by TDD advocates that the 43 + 10 log P standard for OOBE within the commercial bands is not sufficiently stringent to enable effective sharing of the band between TDD and FDD technologies. Here, we consider contentions by APCO and FLEWUG that we should further strengthen the substantially more stringent OOBE limits originally adopted in the *700 MHz First Report and Order* to protect adjacent public safety operations, and US WEST's countervailing assertion that these limits should be substantially eased.

19. Specifically, APCO asserts the 76 + 10 log P standard for base stations is too low, and should be increased to the 87 + 10 log P level. APCO indicates that this change would significantly reduce the size of typical "coverage holes" created for public safety operations by commercial base station transmitters.[39] FLEWUG, for its part, states that a more stringent OOBE is necessary to protect adjacent public safety receivers.[40] It suggests that we adopt an OOBE limit of 80 + 10 log P for emissions into the 764-776 and 794-806 MHz bands from commercial base and fixed transmitters operating in the 747-762 MHz band, and a minimum bandwidth limit, on the order of 200 kHz, for such base and fixed stations.[41] FLEWUG believes that the OOBE limit adopted for commercial mobile transmitters (*i.e.*, the OOBE limit of 65 + 10log P) will adequately protect public safety mobile receivers in the 764-776 MHz band, provided a minimum limit on transmitter bandwidth is also adopted. It also contends that a slightly more stringent OOBE limit of 70 + 10 log P for emissions into the 794-806 MHz band from commercial mobile transmitters is needed to protect public safety base receivers, and should be accompanied by a minimum allowable bandwidth on the order of 200 kHz.[42]

20. In contrast, US WEST asserts our more stringent OOBE standards were adopted without meaningful opportunity to determine if they are genuinely necessary to protect public safety and despite the present absence of public safety use of the spectrum and of commercially available equipment for such use.[43] US WEST states that the limited discussion of the standards' impact on deployment of next generation wireless services and "efficient and intensive use" of spectrum is compounded by the limited discussion of the means by which public safety licensees can minimize OOBE concerns.[44] US WEST argues that the Commission also should require public safety licensees to cooperate with commercial licensees in resolving adjacent channel interference, and allow licensees to negotiate alternative OOBE limits, using 43 + 10 log P as a

[39] APCO Petition at 3.

[40] FLEWUG Petition at 4, Attachment A.

[41] FLEWUG Petition at 4. FLEWUG provides an analysis indicating that as the bandwidth of a commercial transmission is decreased, the required separation between a commercial base station and a public safety base or mobile receiver to preclude interference is increased. FLEWUG therefore proposes a minimum bandwidth of 200 kHz in order to minimize, to the extent possible, this separation distance. FLEWUG believes that adopting such a minimum bandwidth limit would not affect the third generation wireless technologies envisioned for the 700 MHz band.

[42] FLEWUG Petition at 5-6.

[43] US WEST Petition at 6-7.

[44] US WEST Petition at 8.

minimum requirement.[45] In addition, US WEST suggests that we adopt a 65 +10 log P limit, rather than our 76 + 10 log P limit, for base stations operating below 30 feet HAAT.

21. **Discussion.** We are not persuaded that the OOBE standards adopted to protect public safety operations should either be relaxed or be made more stringent. Our adopted OOBE limits were based on the views of NTIA, FLEWUG, and Motorola, as well as other parties, but did not accept any specific analysis as determinative. Rather, they reflect a carefully considered effort to protect public safety, while enabling the viability of the commercial 700 MHz band, which Congress also directed us to establish.[46]

22. We first reaffirm our adoption of our 76 + 10 log P limit to protect public safety operations from 30 megahertz base stations and fixed stations – a limit that is substantially more stringent than the 43 + 10 log P limit we adopted to protect non-public safety operations in this band. While APCO is correct that a more stringent limit (*e.g.*, 87 + 10 log P) would even further reduce the size of coverage holes surrounding commercial base stations, we find that the areas of interference that might exist as a result of our adopted OOBE limit would be sufficiently small. In adopting our 76 + 10 log P OOBE limit for base and fixed stations, we attempted to provide significant protection to public safety operations, and we remain confident that this standard will achieve our goal. APCO states that the aggregate interference from multiple sites could be a concern, and that we should therefore adopt more conservative OOBE limits as a way of addressing this issue. However, APCO does not provide any supporting information that would quantify this effect. Accordingly, we do not believe there is a basis for our reconsideration of our OOBE limits based on the present size of coverage holes surrounding commercial base stations.

23. FLEWUG has proposed that we adopt more stringent OOBE standards than the 76 + 10 log P limit we adopted for base and fixed stations, and the 65 + 10 log P limit we adopted for mobiles and portables.[47] We appreciate FLEWUG's input in this proceeding and its efforts to provide us with its best recommendations for protecting public safety systems from interference. However, the limits proposed by FLEWUG (*i.e.*, 80 + 10 log P for base and fixed stations and 70 + 10 log P for mobiles and portables) are only incrementally greater than those we have already adopted. We do not believe that such an increase is necessary in order to achieve an adequate level of interference protection for public safety. We must balance the additional protection to public safety caused by such an increase against the impact of such an increase on commercial providers. We believe the original rules strike an appropriate balance on this issue.

24. FLEWUG also proposes that, in conjunction with its recommended OOBE limits, we require a minimum allowable bandwidth for commercial systems of 200 kHz as a further means of providing protection to public safety. We do not believe that such a restriction is necessary to protect public safety operations. While this restriction would, according to FLEWUG, reduce required distance separations between commercial transmitters and public safety receivers to preclude interference, we do not believe that, given the strict OOBE limit we have adopted (which we believe adequately protects public safety), it is necessary to increase this protection

[45] US WEST Petition at 8.

[46] TRW notes that our adopted OOBE limits represent a "difficult, but achievable goal," and that tightening those limits would be inconsistent with our goal of "striking a balance between protecting public safety and maintaining the commercial viability of the band." TRW Comments at 6.

[47] FLEWUG provides an analysis describing the severity of interference resulting from commercial systems operating with various bandwidths and complying with various OOBE limits.

further by adopting this additional restriction. Furthermore, adopting stricter limits adds a significant cost: we expect that this proposed additional restriction is likely to preclude or constrain various technologies that licensees may otherwise reasonably seek to employ in the 700 MHz band. For these reasons, we decline to adopt this proposal.

25. US WEST, in arguing for less stringent OOBE limits to protect public safety, asserts that, rather than applying our 76 + 10log P limit uniformly for all base stations, we should apply an OOBE limit of 65 + 10 log P for base stations with antennas below 30 feet HAAT. However, US WEST provides no analysis to demonstrate how that limit would provide adequate protection to public safety receivers.[48] FLEWUG disagrees with US WEST's proposal, and provides an analysis of the interference that would result from base stations operating below 30 ft HAAT. Based on this analysis, FLEWUG concludes that our decision to adopt more stringent limits on OOBE for 700 MHz commercial transmitters is correct. We agree with FLEWUG that we should not adopt a separate, lesser OOBE standard for base stations operating below 30 feet HAAT.

26. US WEST also asserts that less stringent OOBE standards will provide sufficient protection to public safety bands, and therefore urges us to allow for negotiations between commercial and public safety entities on alternative limits, with 43 + 10 log P as a minimum or "fallback" standard. FLEWUG disagrees with this approach, arguing that our decision to enforce our OOBE requirements through the type acceptance process is correct, and "is necessary for the successful development of interoperable systems for law enforcement." As a threshold matter, US WEST has not provided information to support the reduction in protection that the 43 + 10 log P standard represents.[49] Equally fundamentally, we do not believe that this approach will result in appropriate protection for public safety systems, as required by statute. That is, even if a commercial entity successfully negotiates a lower OOBE limit with one or more public safety licensees operating within a particular geographic area, additional public safety systems could be licensed to operate in that area in the future; we would be concerned that once the commercial entity commences operation, all such future public safety systems would be subject to the previously arranged interference protection criteria. We conclude that only the adoption of a strict OOBE limit for commercial equipment will ensure the degree of interference protection we seek for all public safety systems. We therefore reject this proposal.

27. With regard to US WEST's claim that we adopted stringent OOBE standards to protect public safety in the absence of commercially available public safety equipment,[50] we note that we have properly adopted OOBE standards for other wireless services (*e.g.*, Broadband and Narrowband PCS, *etc*.) prior to the development and manufacture of equipment designed to operate in those services. We also agree with FLEWUG's conclusion that the OOBE limits necessary to protect public safety receivers could be established without knowledge of the specific technologies deployed by public safety agencies.[51] We therefore conclude that it is entirely appropriate for us to have adopted OOBE limits to protect public safety equipment.

[48] FLEWUG Opposition at 4-5, Attachment B.

[49] FLEWUG's analysis concludes that interference resulting from commercial systems operating with a 43 + 10 log P limit would in fact "disrupt the reception of public safety communications over much of its coverage area." FLEWUG Opposition at 3-4.

[50] US WEST Petition at 6-7.

[51] FLEWUG Comments at 6.

3. Special Considerations for Use of Channels 65, 66, and 67

28. **Background.** The second harmonic transmissions of services that will be operating on TV channels 65-67 fall within a band used for radionavigation in the Global Navigation Satellite System (GNSS), which includes the Global Positioning System (GPS), the United States component of the GNSS, at 1563.42-1587.42 MHz. GPS involves critical safety-of-life applications, particularly those systems that will use GPS for aeronautical radionavigation. Thus, in addition to balancing public safety and commercial interests, we were also required in the *700 MHz First Report and Order* to adopt a band plan and associated technical rules that would ensure that the GNSS is protected adequately against interference without adopting OOBE limits on equipment operating in the 777-792 MHz band that could effectively prohibit the use of this band by new 30 megahertz licensees. Based on the evidence of record, including the recommendation of NTIA, we adopted the following OOBE limits for all spurious emissions, including harmonics, that fall within the 1559-1610 frequency range, from equipment operating in the 747-762 MHz and 777-792 MHz bands: (1) for wideband emissions, -70 dBW/MHz equivalent isotropically radiated power (EIRP); and (2) for discrete emissions of less than 700 Hz bandwidth, an absolute EIRP limit of –80 dBW.[52] On reconsideration, USGPS contends that the limits we have adopted will not prevent harmful interference to GPS, and that, if we adopt a default standard, absent case-by-case studies, it should be an OOBE limit of -100 dBW/MHz for wideband operations.[53]

29. **Discussion.** We continue to disagree with USGPS's arguments that our adopted emission limits are insufficient to protect GPS operations. USGPS has made these and similar arguments in this proceeding and in other contexts, which we have rejected.[54] As we stated in the *700 MHz First Report and Order*, we are concerned that operations in the 700 MHz bands not adversely affect critical safety-of-life applications of GPS, particularly those systems that will use GPS for aeronautical radionavigation.[55] We continue to believe, however, that an OOBE limit of -70 dBW/MHz EIRP for wideband emissions and an absolute EIRP limit of –80 dBW for discrete emissions of less than 700 Hz bandwidth, suggested by NTIA and adopted in the *700 MHz First Report and Order*, will sufficiently protect aeronautical radionavigation operations and will "ensure that fixed and mobile equipment will not cause radio frequency interference to the GNSS when those systems are used for precision approach and landing."[56] USGPS has presented no new information on reconsideration to support its assertions to the contrary, so we here reaffirm the OOBE limits adopted in the *700 MHz First Report and Order*. [57]

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[52] *700 MHz First Report and Order*, 15 FCC Rcd at 524 (para. 115).

[53] USGPS Petition at 5-8. *But see* Motorola Comments at 9-10 (opposing USGPS's arguments); *see also* USGPS Reply at 3.

[54] *See* USGPS Comments to *700 MHz NPRM* at 3, USGPS Reply in *700 MHz NPRM* proceeding, incorporating by reference and attaching thereto its comments in the GMPCS proceeding.

[55] *700 MHz First Report and Order*, 15 FCC Rcd at 524 (para. 116).

[56] *Id*.

[57] *See 700 MHz First Report and Order*, 15 FCC Rcd at 524 (para. 117), and discussion therein of AirTouch Satellite Services, Inc. Application For Blanket Authority To Construct And Operate Up To 50,000 Mobile Satellite Earth Terminals Through The GLOBALSTAR Mobile Satellite System, *Order and Authorization*, PA 99-2010, October 4, 1999, paras. 10-13.

4. Desired-to-Undesired Signal Ratio

30. **Background.** Section 27.60 of our rules provides technical criteria for the protection of DTV stations from co-channel and adjacent channel commercial 700 MHz stations that may operate in the 700 MHz band. In developing Section 27.60, we incorporated signal-to-noise ratios that were initially designed to provide protection to TV stations from public safety transmitters, which are narrowband in nature (*e.g*., operating with bandwidths of no more than 50 kHz).[58] MSTV requests that we modify Section 27.60 to provide more appropriate protection to DTV stations from the wideband systems that are likely to be employed in the 30 megahertz spectrum.[59]

31. **Discussion**. We affirm the technical criteria adopted in the *700 MHz First Report and Order* for the protection of DTV stations from commercial stations that will operate in the 700 MHz band. MSTV has not submitted any specific proposal or analysis that would provide a basis for developing protection criteria that differs from the criteria we have adopted. In the absence of such a filing, we decline to adopt rules that could result in excessive protection to DTV stations, to the detriment of future licensees that may operate on the 700 MHz band. It is possible that signals emitted by broadband applications may create greater potential for interference than envisioned in the original rules, which were based on narrowband emissions. However, we believe that any interference resulting from such broadband operations problems could be resolved through the use of directional receive antennas that would provide for the increased rejection of undesired signals.

32. We do, however, clarify a statement made in the section of *700 MHz First Report and Order* entitled "Canadian and Mexican Border Regions." In that section we indicated that licenses issued for the 700 MHz bands within 120 km of the borders of Canada and Mexico would be subject to whatever future agreements the United States develops with those two countries. Because, under Section 27.60 of our Rules, which describes the required distance separations between new 700 MHz licensees and existing Channel 59-68 television stations, a new 700 MHz licensee could be required to provide protection to TV facilities located more than 120 km from the licensee's stations, and because we could adopt this same separation criteria with respect to TV stations in Canada and Mexico, the 120 km distance identified in the *700 MHz First Report and Order* will not be applied at this time. Rather, we clarify, simply, that all 700 MHz licensees will be subject to any future agreements the United States develops with Canada and Mexico.

5. Other Technical Issues

33. **Background.** TRW seeks certain reconsiderations or clarifications of the *700 MHz First Report and Order*. Specifically, it asks that we clarify that the power levels and out-of-band emission limits we established should be measured over a period of three microseconds. TRW contends that, depending on how Section 27.50(a)(4) of our Rules is interpreted, there could be an effective constraint on the peak power of a wireless system, which could make certain transmissions, such as those of TRW's Spitfire system, impracticable in the 776-794 MHz band. It concludes that clarifying that power levels be measured over a 3 microsecond time period will serve to enable different types of transmissions in the 700 MHz spectrum. TRW also requests that we clarify Sections 27.53(c)(4) and 27.53(d)(5) of our Rules to indicate whether the references to the 6.25 kHz bandwidth in those rules are intended to apply to the resolution

[58] *See* Section 90.545 of our Rules. 47 C.F.R. § 90.545.

[59] MSTV Petition at 12. No oppositions/comments or replies were received on this issue.

bandwidth only, or whether they are intended also to reflect the bandwidth to which the measurement must be adjusted. Finally, TRW, in conjunction with its request that we extend the same OOBE limits applicable to emissions into the public safety bands as a general constraint on in-band OOBEs, seeks certain additional technical modifications to Section 27.53(c)(3) of our Rules to allow for a gradual reduction of the OOBE limit in the bands immediately outside and adjacent to the 30 megahertz blocks. There were no comments in support of or in opposition to TRW's requests.

34. **Discussion.** With regard to TRW's first request, TRW does not provide support for its assertion that Section 27.50(a)(4) of our Rules could be an effective constraint on the peak power of a wireless system. This rule does not limit peak power and is waveform- and modulation-independent. We therefore decline to adopt TRW's proposal in this regard. As to TRW's request for clarification with respect to Sections 27.53(c)(4) and 27.53(d)(5) of our Rules, we clarify that our reference to a "resolution bandwidth" of 6.25 kHz in those rules practically means that a spectrum analyzer must be set so that it measures the energy in a 6.25 kHz bandwidth. Because spectrum analyzers normally do not have a 6.25 kHz resolution bandwidth setting, a 10 kHz or 3 kHz setting can be used, with the appropriate -2.04 dB or + 3.18 dB adjustments made for the 10 kHz and 3 kHz settings, respectively. Finally, because we have declined to modify our adopted in-band OOBE limits (*see* discussion above), TRW's request for additional technical modifications to Section 27.53 of our Rules is moot, and we thus deny its request for such modifications.

B. CONVENTIONAL TELEVISION BROADCAST ISSUES

1. Inter-Service Flexibility: Preclusion of Conventional Broadcast Services

35. **Background.** In the *700 MHz First Report and Order* we found that the interference and efficiency problems generated by spectrum sharing between conventional television broadcast services and wireless services effectively precluded the provision of both sets of services on this band. Given the Congressional intent that this spectrum be recovered from conventional broadcast use for the provision of commercial wireless services, and the predominant interest in the record in developing this spectrum for fixed and mobile wireless use, we adopted technical and service rules that effectively preclude conventional television broadcast services.[60]

36. On reconsideration, MSTV argues that excluding high-power point-to-multipoint television broadcast services from the 700 MHz band contravenes our spectrum allocation for this band, violates our flexible use policy, and contradicts Congress's intent that maximum flexibility be provided for the use of this band so that the market can determine its most efficient use.[61] MSTV asserts that sharing has been successful in the 470-512 MHz band.[62]

37. APCO opposes MSTV with regard to new conventional television operations, asserting that guard bands would not be sufficient to protect adjacent public safety operations from a "high power, high HAAT broadcast station" over a wide geographic area.[63] APCO also

[60] *700 MHz First Report and Order*, 15 FCC Rcd at 483-86 (paras. 15-19).

[61] MSTV Petition at 9.

[62] MSTV Petition at 2-3.

[63] APCO Opposition at 2-3.

rebuts MSTV's reference to sharing in the 470-512 MHz band; APCO asserts that the 90-mile separation requirement works in that band "only because land mobile use of the band is limited to specific television channels in just eleven metropolitan areas."[64] Motorola similarly states that the 470-512 MHz sharing rules protect broadcast services at the expense of land mobile services, even on adjacent channels. Motorola argues that the Commission is well within its authority to decide against more broadly flexible service rules.[65]

38. **Discussion.** We reaffirm our decision in the *700 MHz First Report and Order* regarding conventional television broadcast services in these bands. As we stated in the *700 MHz First Report and Order*, the interference problem between commercial television broadcast services and wireless services arises from the fundamental and substantial disparity between the two services' characteristic power levels, and the corresponding disparity between their transmitter tower heights. These disparities, in conjunction with the characteristic limits of receivers' ability to distinguish between desired and extraneous signals, inherently create disproportionate interference difficulties for the lower-power service.[66] Our determination not to permit sharing between such disparate services was not based on an assumption that conventional television service has unique interference characteristics, as MSTV would have it,[67] but on our basic understanding, supported by experience in the 470-512 MHz context and by Motorola's opposition, of the inherent interference effects that such technically disparate services have on one another, and the heightened potential for interference that naturally arises the greater the underlying disparities.

2. Transition to DTV and Voluntary Relocation of Incumbent Broadcast Licensees

39. **Background.** In addition to addressing certain technical aspects of the service rules, some petitioners also address issues relating to the transition to DTV. The statutory mandate that we recover and license the 700 MHz spectrum for commercial and public safety uses several years before the target for completion of the DTV transition presents additional issues for the new uses of this spectrum band.

40. NAB challenges two aspects of our rules for the 700 MHz band, both keyed to our treatment of the transition to DTV. First, NAB objects to our use of the target date for the completion of the DTV transition -- December 31, 2006 -- as the basis for setting certain regulatory dates for the new commercial licenses. For example, in the *700 MHz First Report and*

[64] APCO Opposition at 2-3.

[65] Motorola Opposition at 2-5.

[66] See 700 MHz First Report and Order, 15 FCC Rcd 483-485 (paras. 15-18). In contrast, much less serious interference problems, and substantially mitigated spectrum efficiency losses, are generated when multiple services that operate at comparable power levels share spectrum. We noted in the *700 MHz First Report and Order* that these effects are recognized in Commission Rules establishing minimum distance separation requirements between conventional television facilities using the same channel, and between facilities using adjacent channels. *See* 47 C.F.R. § 73.610.

[67] "The notion that a particular service is prone to 'inherent' interference is nonsensical as a matter of physics. Interference is a function of proximity and signal level and can occur regardless of the type of service involved." MSTV Petition at 6.

Order, we decided that both the license term[68] and the substantial performance deadline[69] for new commercial licensees should be set at eight years after the 2006 target date, or January 1, 2015. NAB contends that this approach fails to acknowledge that the 2006 target date for completion of the DTV transition may be extended in many markets.[70] NAB asks us to revise the text of the Order and Rules to identify "completion of DTV transition"[71] as the triggering event for commencement of the eight-year license term and substantial performance period.

41. Second, NAB objects to certain guidance we provided on how we would treat voluntary agreements between incumbent broadcasters and new 700 MHz licensees that could result in some broadcasters moving out of the band prior to the conclusion of the DTV transition period. In the *700 MHz Notice of Proposed Rulemaking*, we had proposed to consider agreements between new licensees in this spectrum and licensees of protected, incumbent television stations that would compensate incumbents for: (1) converting to DTV-only transmission before the end of the statutory transition period; (2) accepting higher levels of interference than allowed by the protection standards; or (3) otherwise accommodating new licensees.[72] In the *700 MHz First Report and Order,*[73] noting that Congress had directed us to auction 36 MHz for commercial use several years before the DTV transition would be completed, we indicated that we would consider specific regulatory requests needed to implement voluntary agreements between incumbent licensees and new licensees for clearing these bands. We articulated the general criteria we would apply in reviewing and acting on those requests.[74]

42. In its petition for reconsideration, NAB contends that accelerated clearance of incumbents appears "contrary to Congress' clear intent to insure that viewers do not lose their existing analog television service during the DTV transition," and argues that the Commission does not have discretion to consider whether the public interest would be served by approving

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[68] *700 MHz First Report and Order*, 15 FCC Rcd at 504 (para. 67).

[69] *700 MHz First Report and Order*, 15 FCC Rcd at 505 (para. 70).

[70] NAB Petition at 1-2, 6-7. No oppositions, comments or replies were received on this issue.

[71] NAB Petition at 7-8.

[72] *700 MHz NPRM*, 11 FCC Rcd at 11056 (para. 99).

[73] Sections 336 and 337 of the Communications Act and the Consolidated Appropriations Act direct us to auction the 36 MHz spectrum for commercial use six years before the statutory relocation target for incumbent broadcasters. *See* 47 U.S.C. §§ 336-337. *See also Consolidated Appropriations*, Appendix E, Sec. 213. *See also* 145 Cong. Rec. at H12493-94 (Nov. 17, 1999).

[74] We indicated we would consider such public interest criteria as the benefits to consumers of such new wireless services as Internet fixed access services, whether such agreements would help clear spectrum for public safety use or for new wireless service in rural or other relatively underserved communities, and the impact of the loss of service on the licensee's broadcast community. We indicated that, in evaluating loss of service, we would consider the availability of the licensee's former analog signal within the service area, through simulcast of that signal on the licensee's DTV channel or distribution of the signal on cable or DBS, as well as the availability of similar broadcast services within the service area, (*e.g.*, whether the lost service is the only network service, the only source for local service, or the only source for an otherwise unique broadcast service). *700 MHz First Report and Order*, 15 FCC Rcd at 534 (para. 145).

such specific requests.[75] In support, NAB cites the requirement in Section 337(d)(2) of the Communications Act, as amended, that full-service television be protected from interference during the transition; Section 309(j)(14)(B)'s provision for extensions of the 2006 transition deadline; and a statement in the Conference Report relating to Section 309(j)(14)(B), which explains that the possibility of extensions of the transition beyond 2006 is designed "to ensure that a significant number of consumers in any given market are not left without broadcast television service as of January 1, 2007."[76] NAB also argues that granting regulatory requests to accommodate the use of the 700 MHz band by new wireless licensees conflicts with the long-standing policy of preserving free broadcast television, evidenced in 1992 Cable Act, which requires cable systems to dedicate a portion of their channels to local broadcast stations.[77]

43. Motorola, APCO, SEG, and US WEST, on the other hand, agree that the Commission has the authority to approve, and should approve, voluntary agreements to clear the 700 MHz band of incumbent broadcasters on an accelerated basis.[78] For example, Motorola vigorously supports the need for additional Commission involvement in promoting the voluntary removal of the incumbent broadcasters.[79] Motorola asserts that use of spectrum for public safety deserves "at least equal consideration" with continued over-the-air broadcast service.[80]

44. **Discussion.** While we understand the concerns raised by NAB, we conclude that its arguments do not require us to modify our approach here. First, we do not agree with NAB that we have improperly defined the license term and substantial performance deadline for new 700 MHz licensees. To the contrary, our order and the accompanying Rules expressly recognize that the DTV transition deadline of December 31, 2006 is a "soft" target that may be extended in individual markets if the provisions of Section 309(j)(14) are met. Second, we disagree with NAB's view that we lack authority to facilitate the early relocation of incumbent broadcast licensees, pursuant to voluntary agreements between the parties. We find instead that the pertinent provisions of the Balanced Budget Act of 1997, as well as the overall statutory scheme, support our authority to consider regulatory requests necessary to implement such voluntary agreements. In our view, both the transition to DTV and clearance of this spectrum will generally be furthered, not frustrated by such voluntary agreements.

45. In response to NAB's first point, we note that Section 27.13(b) of our Rules, as amended, states, in pertinent part, that "initial authorizations for the 746-764 MHz and 776-794

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[75] NAB Petition at 4.

[76] *Id*. at 2-3, *citing* H.R. Rep. No. 217, 105th Cong., 1st Sess. 576-77 (1997).

[77] *Id*. at 5, *citing* Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622, 646 (1994) (*Turner I), reaffirmed* 520 U.S. 180, 193 (1997) (*Turner II*) (upholding "must carry" requirements).

[78] *See* Motorola Comments at 8; APCO Opposition at 4; SEG Opposition at 2-5; US WEST Opposition/Comments at 5-7. *See also* APCO Reply at 3; AirTouch Reply at 2; BellSouth Reply at 5; Motorola Reply at 2. ALTV opposes Commission action that would require the involuntary termination of operations on these channels, but clarifies that it is neutral on the issue of whether a broadcaster can voluntarily sell its facility to a third party and thereby terminate free, over-the-air service on that channel. ALTV *ex parte* filing, May 18, 2000.

[79] Motorola Reply at 2.

[80] Motorola Comments at 7-8.

MHz bands will extend until January 1, 2015."[81] Both the "substantial performance" and TV protection requirements are referenced to this date. When we established the 14-year license term in the *700 MHz First Report and Order*, we noted that the 2006 DTV transition deadline "may be extended under particular circumstances set forth in 47 U.S.C. § 309(j)(14)(B), including for those markets where 15 percent or more households do not have access to either DTV-equipped receivers or multi-channel video."[82] We explained that we were setting a definite license term, rather than one dependent on the actual date on which incumbent broadcasters complete their digital television transition, in view of the fact that each geographic licensing area will have a number of incumbent broadcasters. In this environment, it made sense to us to use the common target date for completion of the DTV transition as the basis for setting the license term and performance deadlines. The alternative would be to have an unspecified reference date, and, by implication, an indefinite license term. We note that, even from the very beginning of the new license terms, much of the licensed spectrum will be available in many parts of each geographic area, so it is not the case that the band will have no value to the new licensee until completion of the DTV transition. Moreover, it is our hope that before the end of 2006 additional parts of the band will be cleared as the result of voluntary agreements between broadcasters and licensees.[83] Thus, we find that the revisions NAB suggests to the *700 MHz First Report and Order* and the accompanying Rules are unnecessary.

46. With respect to NAB's second point, which addresses the possibility of voluntary agreements being reached by incumbent broadcasters and new 700 MHz licensees, we affirm our statutory authority to review and approve regulatory requests necessary to implement such agreements. NAB does not identify any specific aspect of our well-settled statutory authority to make spectrum allocation decisions by rulemaking,[84] to review licensees' requests for modification of license, [85] or even subsequently to adjust allocations and the terms and conditions governing individual licenses,[86] as having been altered—either by the legislative enactments that authorize development of advanced television service, or by the later enactments directing recovery of the 700 MHz band for commercial and public safety uses. Indeed, we find that Sections 309(j)(14) and 337(d)(2), and the accompanying legislative history cited by NAB, support our authority to facilitate the early relocation of incumbent broadcasters. Section 309(j)(14) contains an outside limit to continued analog operations (until December 31, 2006), subject to the possibility of an extension upon request of a station, and satisfaction of the stated

[81] *See* Section 27.14(a) of the Commission's Rules, which addresses performance standards, and incorporates this deadline by referencing §27.13. 47 C.F.R. §§ 27.13(b) and 27.14(a).

[82] *700 MHz First Report and Order*, 15 FCC Rcd at 504 (n.161).

[83] *See* discussion at paras. 53-56.

[84] *See, e.g.*, Amendment of Parts 2, 89, 91, and 93; Geographic Reallocation of UHF-TV Channels 14 through 20 to the Land Mobile Radio Services for Use within the 25 Largest Urbanized Areas of the United States, Docket No. 18261, *First Report and Order*, 23 F.C.C. 2d 325 (1970).

[85] *See* 47 U.S.C. §§ 303, 307, 308 and 309.

[86] *See* 47 U.S.C. §§ 303, 316 (authorizing the Commission to modify licenses to promote the public interest, convenience and necessity); *see also* Modification of FM or Television Licenses Pursuant to Section 316 of the Communications Act, *Order*, 2 FCC Rcd 3327 (1987); Transcontinent Television Corporation v. FCC, 308 F.2d 339 (D.C. Cir. 1962) (relationship between allocation of spectrum by rulemaking and licensee's right to hearing under Section 316).

requirements for such an extension. While this Section thus entitles a broadcaster to request and receive an extension of the 2006 transition deadline if it is operating in a market with a defined low DTV penetration rate, nothing in Section 309(j)(14) requires the broadcaster to request (or the Commission to impose *sua sponte*) an extension of the deadline, and nothing in this Section requires the broadcaster to continue operating in both analog and digital modes prior to this deadline. In managing the transition to DTV, we have, as a general matter, prohibited broadcasters from terminating their analog service early,[87] but we have modified that general approach in this proceeding to accommodate voluntary agreements that will, without an undue adverse effect on the public's overall receipt of broadcasting service, expedite the full commercial and public safety use of the 700 MHz spectrum specified in Section 337.

47. To infer, as does NAB, that the provisions of Section 309(j)(14) have stripped the Commission of its discretion to consider the public interest benefits of these voluntary agreements and to approve them under appropriate circumstances, would reduce the Commission's authority over broadcast licensing matters, including the transition from analog to digital television licensing. Under accepted rules of statutory construction, such a change in an agency's existing statutory authority should be stated expressly and not implied.[88]

48. As demonstrated above, however, the statutory language contains no express, or even implied, restriction on the Commission's jurisdiction to consider the voluntary agreements at issue. Indeed, even the inferences that NAB draws from the legislative history are misplaced. Specifically, the cited statement in the Conference Report – which explains why the legislators were providing the broadcasters with the option under certain circumstances of seeking an extension of the 2006 transition deadline – avers that this extension option is designed to "ensure that a significant number of consumers in any given market are not left without broadcast television service as of January 1, 2007,"[89] not to ensure that every station remains on the air or that every individual receives the exact same service he or she was receiving prior to the transition. Accordingly, the standards we intend to follow in considering a request for approval of a voluntary agreement to make an early transition to digital operations are designed to ensure that such an agreement does not deprive a substantial number of viewers of their overall broadcast television service.

[87] *See* Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, *Fifth Report and Order*, 12 FCC Rcd 12809, 12832-12833 (paras. 55-56) (1997); *Memorandum Opinion and Order on Reconsideration*, 13 FCC Rcd 6860, 6886-6887 (paras. 77-78) (1998).

[88] *See, e.g., Administrator, Federal Aviation Administration v. Robertson*, 422 U.S. 255 (1975) (holding that passage of initial version of FOIA Exemption 3, which authorized non-disclosure of material if specifically exempted from disclosure by statute, could not be used to imply repeal of FAA's broadly stated statutory discretion to withhold disclosure of information under Section 1104 of the Federal Aviation Act of 1958); *Scripps-Howard Radio, Inc. v. FCC*, 316 U.S. 4, 11 (1942) (noting that, absent a specific repeal of jurisdictional authority, "[t]he search for significance in the silence of Congress is too often the pursuit of a mirage"); *U.S. v. Hsia*, 176 F.3d 517, 525-26 (D.C. Cir. 1999) (citing the "presumption against repeal by implication," and stating that it "will not find repeal absent 'clear and manifest' evidence that it was intended [by Congress]," in holding that the Federal Election Campaign Act did not effect *pro tanto* repeal of general criminal statutes proscribing making of false statements to federal agency), *cert. denied*, 120 S.Ct. 978 (2000); 82 C.J.S. Statutes § 288 (1953) (stating that repeal of statutes by implication is not favored, and courts will not make such a finding of repeal if they can avoid doing so consistently, or on any reasonable hypothesis, or if they can arrive at another result by any construction that is fair and reasonable).

[89] 143 Cong. Rec. H6174 (July 29, 1997).

49. We are similarly unpersuaded by NAB's contention that Section 337(d)(2) demonstrates Congress' intent to ensure that viewers did not lose their existing analog television service, whether through early relocation or by interference from new 700 MHz licensees. With regard to interference from new 700 MHz licensees, the Part 27 service rules do not permit new licensees to infringe on the continued protection afforded incumbent television licensees, and NAB does not assert the contrary. Rather, the service rules, in conjunction with the Commission's broad authority to deal with interference issues and review requests to modify licenses,[90] permit incumbents to voluntarily negotiate reductions in their protection from interference. We do not construe Section 337(d)(2) to preclude such voluntary arrangements by incumbents, and will review such proposals under the guidelines described below.

50. We also find misplaced NAB's reliance on the "must carry" provisions of the 1992 Cable Act, which require cable system operators to dedicate a portion of their channels to local broadcast signals. We remain committed to maintaining the established, close relationship between "must carry" provisions and free, over-the-air broadcasting.[91] In this context, the record in the DTV proceeding indicates that incumbent licensees operating on UHF channels 52-69 are significantly burdened by the expense of constructing and/or operating a second channel, whether analog or digital, in spectrum that will eventually be foreclosed to conventional broadcasting.[92] Assistance from incoming 700 MHz licensees that negotiate clearance agreements with incumbent broadcasters will ease these burdens. In some instances these agreements may provide sufficient funds to enable incumbents, whether commercial or noncommercial, to achieve a smooth DTV transition that otherwise would have been problematic. We expect that incumbents will enter into such agreements only when they determine that the long term viability of their service will be improved thereby. The overall effect of voluntary agreements that result in an infusion of capital to incumbent broadcasters, should, in our view, be a strengthening of the free, over-the-air DTV service ultimately provided by channel 59-69 incumbents.

51. We further affirm that we possess authority to review and approve regulatory requests made in connection with voluntary agreements as part of our authority, under the statutory scheme as a whole, to take steps to manage the electromagnetic spectrum in the manner that most effectively facilitates the transition of this spectrum from conventional broadcast to commercial and public safety use. We have general authority over spectrum management issues,[93] that allows us to take steps necessary and appropriate to ensure the efficient use of spectrum, including spectrum to be assigned via competitive bidding. Section 309(j) of the Act confers authority on the Commission to assign licenses by competitive bidding and requires that the Commission "reclaim and organize the electromagnetic spectrum" in a manner consistent with the broad objectives of the grant of competitive bidding authority.[94] Those objectives include "development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas,"[95] and "efficient and intensive use of

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[90] *See, e.g.*, 47 U.S.C. §§ 303(f), 307(b), 308(a) and (b), 309(a).

[91] *See, e.g.*, *Turner I*, *supra* n. 77.

[92] *See Reconsideration of DTV Fifth Report and Order,* 13 FCC Rcd at 6885-6886 (paras. 74-75).

[93] *See, e.g.*, 47 U.S.C. §§ 301 and 303.

[94] 47 U.S.C. § 309(j)(14)(C).

[95] 47 U.S.C. § 309(j)(3)(A).

the electromagnetic spectrum."[96] Certainly where such voluntary agreements contemplate the modification of an incumbent broadcaster's license to permit an accelerated transition to DTV, we have authority under Section 307(b), when considering "applications for licenses, and modifications and renewals," to make "such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same."[97] Our authority under Section 4(i), in conjunction with Sections 303, 307(b), 308, 309(j), and 316, authorizes us to "perform any and all acts" necessary in the execution of the Commission's functions, also supports our authority to review voluntary agreements between incumbent broadcast licensees and new 700 MHz licensees to accelerate the transition to DTV.[98]

52. We conclude that Congressional enactments addressing the DTV transition and the transition of this spectrum to commercial wireless services support our finding of authority to review and approve regulatory requests necessary to implement such voluntary agreements. Both Section 337, which first directed the reallocation and assignment of 60 megahertz of the 700 MHz band to public safety and commercial use, and the subsequent Consolidated Appropriations Act,[99] which further accelerated the schedule for auctioning the commercial band segments, enable the Commission to facilitate initiation of commercial wireless service several years prior to conclusion of the DTV transition. We conclude that facilitating voluntary agreements to transition to DTV allocations—which will lead to the expeditious recovery of the 700 MHz television spectrum for use in providing other services—is consistent with Congress' instruction to the Commission that the original or additional television license be surrendered pursuant to Commission regulation,[100] and with the statutory framework of licensing this spectrum for commercial use prior to the end of the DTV transition.

53. We thus conclude that we have the authority to review regulatory requests necessary for parties to implement the voluntary agreements described above, and that voluntary agreements between incumbent broadcast licensees and new 700 MHz licensees, if properly structured, will further the broad public interest in intensive and efficient use of the radio spectrum.[101] Such agreements should facilitate the provision of new wireless services to all

[96] 47 U.S.C. § 309(j)(3)(D); *see also* Section 706 of the Communications Act, 47 U.S.C. § 157 (directing the Commission to encourage the reasonable and timely deployment of advanced telecommunications capability to all Americans).

[97] 47 U.S.C. § 307(b). The Commission's authority to modify licenses is established by 47 U.S.C. § 316.

[98] 47 U.S.C. § 154(i) reads:

> The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions.

See also 47 U.S.C. § 157 (establishing a policy of the United States to encourage the provision of new technologies and services to the public).

[99] *See* Pub. Law 106-113, 113 Stat. 1501, Appendix E, Section 213. *See also* 145 Cong. Rec. at H12494-94, H12501 (Nov. 17, 1999), "Making consolidated appropriations for the fiscal year ending September 30, 2000, and for other purposes."

[100] *See, e.g.*, 47 U.S.C. § 309(j)(14)(C); 47 U.S.C. § 336(c).

[101] *See* 47 U.S.C. § 309(j)(3)(D).

Americans,[102] should help make available to the public safety community needed new spectrum that Congress has mandated be allocated for public safety use,[103] and should help expedite a transition to DTV for broadcasters who might need assistance to implement such a transition. Such voluntary agreements are consistent with the legislative purposes of achieving an orderly DTV transition and expeditiously recovering this spectrum.[104]

54. The importance of clearing the spectrum was stressed by a number of commenters, including AirTouch, BellSouth, Motorola, and APCO, who urge us to take additional steps to "encourage more rapid clearing" of this spectrum."[105] BellSouth, for instance, asks us to promulgate rules that will enable new 700 MHz licensees to negotiate with incumbents.[106] Similarly, Motorola supports additional Commission involvement in promoting the voluntary release of their 700 MHz channels by incumbent broadcasters.[107] As we noted in the *700 MHz First Report and Order*, the rapidly expanding demand for wireless voice and data services and the increased spectrum necessary to support wideband applications to be implemented with next generation technologies confirm that these bands should be structured to enable their efficient and intensive use for wireless services and technologies.

55. Also as stated in the *700 MHz First Report and Order*, in reviewing voluntary agreements, we must weigh as well the benefits associated with recovery of the spectrum for new wireless uses against loss of service to the broadcast community of license. Loss of broadcasting service has been a long-recognized detriment to the public interest. The fundamental importance of over-the-air broadcast service is recognized by legislative and judicial determinations, and our own practice in reviewing specific instances of loss of service.[108] Where a licensee seeks to reduce service in ways that do not enable a new operator to use the spectrum, we have regarded the loss of broadcast service, even for a transitional period, as a particularly serious issue in a public interest balance.[109] In the past, the Commission has required that stations withdrawing or downgrading existing service justify that action by establishing offsetting considerations that demonstrate the public generally will be benefited.[110]

[102] *See* 47 U.S.C. §§ 151, 307(b), 309(j)(3)(A), 309(j)(4)(B).

[103] *See* 47 U.S.C. §§ 337(a)(1), 337(c), 337(d)(3), 337(d)(4).

[104] *See* 47 U.S.C. §§ 336(b), 336(c), 336(f).

[105] *See* APCO Reply at 3.

[106] BellSouth Reply at 5-6. BellSouth also urges us to take steps to require 60-69 incumbents to relocate. In this order, we address only the prospect of voluntarily negotiated agreements between 700 MHz licensees and incumbent broadcasters.

[107] Motorola Reply at 2.

[108] *See, e.g., West Michigan Telecasters, Inc. v. FCC*, 460 F.2d 883 (D. C. Cir. 1972) (*West Michigan Telecasters*) (losses in service are *prima facie* inconsistent with the public interest, and must be supported by a strong showing of countervailing factors).

[109] *See, e.g.,* Public Interest Obligations of TV Broadcast Licensees, MM Docket No. 99-360, *Notice of Inquiry*, 14 FCC Rcd 21633 (1999).

[110] *See, e.g., West Michigan Telecasters.*

56. We have carefully considered the weight to be accorded such losses that arise as part of the 700 MHz band licensing process, both from a broad policy perspective and in the review of specific regulatory requests. From the broader perspective, we have determined, as described above, that the several statutory purposes involved here are best furthered by enabling voluntary agreements that result in the expeditious and efficient recovery of these frequencies for the legislatively specified commercial and public safety purposes. In relying on the voluntary judgment of incumbent broadcast licensees with a direct interest in strengthening their transition to DTV, we believe our policy serves the longer-term public interest in sustaining over-the-air television, notwithstanding the limited and temporary losses of service that may result. We also note that the over-the-air service involved here is scheduled to terminate as part of the DTV transition, and Congress has directed us to auction and license these frequencies on an expedited schedule well in advance of December 31, 2006. Thus, we find that limited and temporary loss-of-service issues here -- especially when the loss results in supplemental resources that can be expected to expedite the arrival of advanced services and strengthen the individual licensee's longer-term viability as a DTV provider – do not raise concerns that prevent us from entertaining regulatory requests in connection with voluntary agreements. We reach these conclusions based on both of two alternative legal rationales – that recent statutory enactments and our policy judgments regarding the transition of 700 MHz spectrum distinguish our review of regulatory requests in connection with voluntary agreements from our historical loss-of-service cases, and that our overall policy goals here constitute offsetting considerations demonstrating that the public generally will be benefited.

57. *Review of Specific Regulatory Requests Necessary for Parties to Implement Voluntary Agreements.* We implement these policy judgments by providing guidance on the review of regulatory requests arising from band clearance agreements between new licensees of this spectrum and incumbent broadcast licensees on channels 59-69.[111] For example, Spectrum Exchange asks the Commission to establish a "strong presumption" in favor of regulatory requests that would clear spectrum in connection with an accelerated transition to DTV.[112] Paxson Communications also supports the adoption of an FCC policy for moving DTV allocations from this band.[113]

[111] Our rules specifically require new licensees to provide adjacent channel protection to broadcasters on Channel 59, as well as protection to Channels 60-69. *See 700 MHz First Report and Order*, 15 FCC Rcd at 532-33 (para. 141). Thus, we would apply the standards to voluntary agreements for an accelerated DTV transition for stations on Channel 59. *See* Reallocation of Television Channels 60-69, the 746-806 MHz Band, ET Docket No. 97-157, *Report and Order*, 12 FCC Rcd 22953 at 22955 (para. 4) (1998), *citing* PSWAC, Final Report of the Public Safety Wireless Advisory Committee to the Federal Communications Commission, Reed E. Hundt, Chairman, and the National Telecommunications and Information Administration, Larry Irving, Assistant Secretary of Commerce for Communications and Information (Final Report)(1996).

[112] Specifically, Spectrum Exchange contends that we should establish a strong presumption when the affected television market has 60 percent or better cable penetration and the individual station certifies that it will establish DTV-only transmissions for at least 80 percent of the hours per week that it broadcast by analog signal in 1999. Spectrum Exchange *ex parte* filing, May 3, 2000.

[113] Paxson states that its amenability to relocation is contingent on: (1) having an "acceptable" DTV must carry rule in place; (2) having an established FCC policy for moving DTV allocations from the 700 MHz band; and (3) receiving "reasonable compensation" from auction bidders for terminating analog operations. Paxson Communications *ex parte* filing, May 3, 2000.

58. In implementing our policy of facilitating the clearance of these bands to the extent that incumbent broadcasters and new 700 MHz licensees voluntarily negotiate agreements toward that end, we make two initial observations. First, we believe that private parties generally are the best evaluators of their own economic circumstances and alternatives and we will not look to second guess their business decisions. Our underlying policy premise is that voluntary agreements can provide supplemental resources to broadcasters that will both expedite their transition to DTV and strengthen their economic viability, as well as enable earlier delivery of new wireless services, but the private parties should determine for themselves, in light of specific circumstances, when the economic case is made. When the private parties are satisfied, therefore, we will be inclined to grant regulatory requests arising from such private commercial arrangements, provided the requests do not, on balance, have adverse public policy consequences. Second, we note that our role will be limited to weighing the effect on the public interest of regulatory requests in connection with such agreements. We will not be reviewing the wisdom of the underlying private agreements, or, in the normal course, the negotiation processes leading to them.[114]

59. We also implement our policy by establishing a process and specific guidance for parties potentially interested in negotiating voluntary agreements. To ensure that all public interest issues are readily identified, we will require broadcasters that enter into voluntary band clearance agreements, when they submit regulatory requests arising from those agreements, to provide the public in the principal area served by the licensee with the notice required by Part 73 of the Commission's Rules for the filing of applications involving major modifications.[115] In addition, we will issue public notice of the filing of all regulatory requests requiring our approval. Further, we clarify that our review of such requests generally will fall within Section 316 of the Act, which grants us authority to modify existing licenses in order to "promote the public interest, convenience and necessity."[116] We also note that we will consider showings of actual loss of service, rather than theoretical loss, resulting from a voluntary agreement.[117]

60. *Presumption Favoring Grant of Regulatory Requests In Certain Circumstances.* Consistent with our overall goals described above, we establish a rebuttable presumption that, in certain circumstances, substantial public interest benefits will arise from a voluntary agreement between a 700 MHz licensee and an incumbent broadcast licensee on channels 59-69 that clears the 700 MHz band of incumbent television licensees(s).[118] Our threshold premise is that such

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[114] *But see* 47 C.F.R. § 1.2105(c) (anti-collusion rule).

[115] 47 C.F.R. §§ 73.3580(d), 73.3572(a). Because analog and DTV broadcasting authority is conjoined in a single, unitary license, discontinuance of the analog over-the-air signal is a modification of license rather than a complete discontinuance of service.

[116] *See* 47 U.S.C. § 316.

[117] For example, we can envision voluntary agreements that would result in a particular incumbent station in the 700 MHz band, as a practical matter, being unable to deliver a viewable signal throughout its entire Grade B contour. However, where implementation of a voluntary agreement would result in a theoretical loss of service, we will permit the parties to demonstrate that no actual loss of service to viewers will occur, based upon the procedures set forth in OET Bulletin No. 69.

[118] The presumption, as well as the case-by-case analysis described in paras. 63-65, is applicable to Channel 59 as well because new 700 MHz licensees are required to protect broadcasters on that channel. *See* note 111, *supra*.

agreements, by providing supplemental resources to incumbent broadcast licensees facing the costs of transition to DTV operations, will strengthen the viability of those licensees and their ability to provide over-the-air service in the long run, as well as enable expeditious delivery of new wireless services, and that some temporary loss of over-the-air service is permissible in order to realize those benefits. This presumption also reflects our preference, as described above, for relying on voluntarily negotiated private transactions.

61. Specifically, we will initially presume that the public interest is substantially furthered when an applicant demonstrates that the grant of its request will both result in certain specific benefits and avoid specific detriments. We would recognize such a presumption favoring grant of any requests that: (1) would make new or expanded wireless service, such as '2.5' or '3G' services, available to consumers; [119](2) would clear commercial frequencies that enable provision of public safety services;[120] or (3) would result in the provision of wireless service to rural or other underserved communities.[121] The applicant would also need to show that grant of the request would not result in any one of the following: (1) the loss of any of the four stations in the designated market area (DMA) with the largest audience share;[122] (2) the loss of the sole service licensed to the local community; or (3) the loss of a community's sole service on a channel reserved for noncommercial educational broadcast service.[123] We conclude that the

[119] These are important and valuable services. *See 700 MHz First Report and Order*, 15 FCC Rcd at 492 (para. 38) (potential use of wider, 10 megahertz segments for broadband services, including higher speed Internet access); 15 FCC Rcd at 497-498 (para. 52) (facilitating use of bands for next generation applications that would benefit from economies of scale provided by licensing on national or large regional basis). *See also* Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, *Report*, 14 FCC Rcd 2398, 2400-2403 (paras. 1-8) (1999) (*Section 706 Report*).

[120] Because conventional broadcast signals require protection from transmissions on both their own channel and adjacent channels, the relocation or termination of a broadcast service increases the usability of spectrum beyond the immediate channel vacated. Thus, an agreement between a commercial service provider and a broadcaster to clear a specific channel will inherently mitigate interference to users on adjacent channels, and these users may include public safety entities.

[121] *See* Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Notice of Proposed Rulemaking*, 14 FCC Rcd 13679 (1999), *Report and Order and Further Notice of Proposed Rulemaking*, FCC 00-209, adopted June 8, 2000; Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes, FCC 00-207, adopted June 8, 2000; Federal-State Joint Board on Universal Service: Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas, CC Docket No. 96-45, *Further Notice of Proposed Rulemaking*, 14 FCC Rcd 21177 (1999), *Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking*, FCC 00-208, adopted June 8, 2000. *See also Section 706 Report*, 14 FCC Rcd at 2432-2442 (paras. 63-84) (service to rural areas and elementary and secondary schools).

[122] To make this showing, an applicant would have to demonstrate that the entire loss area would continue to receive Grade B service or protected Class A service from these four stations, based on the stations' market share for the most recent rating period prior to the filing of the application. Determination of the four stations with largest market shares in a DMA will be consistent with our existing regulations and practice in other broadcast regulation contexts. *See* Review of the Commission's Regulations Governing Television Broadcasting, Television Satellite Stations Review of Policy and Rules, *Report and Order*, MM Docket Nos. 91-221, 87-8, 14 FCC Rcd 12903 (1999).

[123] 47 C.F.R. § 73.606(a).

presumption we establish is consistent with Congress' objectives for this spectrum, should generally increase the attractiveness of the spectrum to potential 700 MHz licensees, and will facilitate the expeditious transition to DTV without undue loss of broadcast service.

62. This presumption is not conclusive or dispositive, however. In specific cases where the presumption applies, for instance, we would consider whether special or unique factors raised by the resulting loss of broadcast service would be sufficient to rebut the presumption. Also, for regulatory requests to which the presumption does not apply, we would consider all the relevant public interest factors regarding provision of wireless services, acceleration of the DTV transition, and the loss of broadcast service in deciding whether or not to approve the request.

63. *Review of Regulatory Requests Not Subject to Presumption.* When the presumption described above is not established, or is rebutted, we will review regulatory requests by weighing the loss of broadcast service and the advent of new wireless service on a case-by-case basis.[124] If, for example, the community temporarily losing its only local service is part of a larger market that has a plethora of local television signals, and if the service areas of those other local signals correspond closely with the service area of the station to be temporarily lost, then we would be confident that the community would continue to receive substantial over-the-air service. Similarly, we would be less concerned regarding the community's loss of sole service on a reserved noncommercial educational channel if the community receives service from a station licensed to another community on a channel that is reserved for noncommercial educational service.

64. In reviewing specific requests not subject to the favorable presumption, we also would consider as a relevant factor in our public interest determination the extent to which the station's signal will remain available, after implementation of the agreement, to a significant number of its viewers in the licensee's service area. For instance, we would find it significant if that signal is effectively available to a significant number of current viewers through various existing distribution channels, and implementation of the voluntary agreement would not create additional TV white or gray area.[125] As part of our review of the continued availability of a station's signal we also would consider the extent to which the station has made additional arrangements to make its signal available to the community.[126] The availability of alternative distribution channels, such as cable and DBS (and, increasingly, over-the-air DTV service), can serve a useful role in helping to facilitate the transition to DTV, consistent with Congress' intent. The availability of a station's signal over these alternative technologies, and the extent to which viewers within the incumbent broadcasting licensee's Grade B contour receive the station's signal over these alternative technologies, will both mitigate and help us determine any actual loss of service.

65. We recognize that cable carriage can play an important role as an alternative distribution channel during this transition period by providing continued service to viewers who would otherwise be deprived of broadcast service. Although we will be considering in a separate

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[124] The Commission recently weighed multiple public interest factors in considering several applications for modification of licensed television facilities in the Los Angeles market. KRCA License Corp., 15 FCC Rcd 1794 (1999).

[125] TV white area is an area not served by any Grade B television signal. TV gray area is an area served by only one Grade B television signal.

[126] See paragraph 65 below.

order the scope and manner of cable carriage of digital broadcast signals during the transition,[127] we find that it would be helpful to address two limited issues here, in the context of our discussion of voluntary band clearing agreements. First, we wish to clarify that cable systems are ultimately obligated to accord "must carry" rights to local broadcasters' digital signals.[128] Existing analog stations that return their analog spectrum allocation and convert to digital are entitled to mandatory carriage for their digital signals consistent with applicable statutory and regulatory provisions. Second, to facilitate the continuing availability during the transition of the analog signal of a broadcaster who is party to a voluntary band clearing agreement with new 700 MHz licensees, such a broadcaster could, in this context and at its own expense, provide its broadcast digital signal in an analog format for carriage on cable systems. In these circumstances, nothing prohibits the cable system from providing such signals in analog format to subscribers, in addition to or in place of the broadcast digital signal, pursuant to an agreement with the broadcaster. We will consider the status and appropriate duration of these special arrangements and provide opportunity for comment, as we review the progress of the digital transition in the periodic reviews after 2003.[129] We will discuss the details of the manner of carriage appropriate for digital broadcast signals, as well as other technical issues, in a forthcoming digital must carry order.

66. We believe that the presumptions and factors we have described in the preceding paragraphs will assist parties as they negotiate voluntary agreements. Our overarching, long-term goal is to ensure the availability of this spectrum for wireless uses, and an expeditious transition to digital television that reflects the business judgment of individual licensees to the maximum practicable extent, consistent with the public interest. The presumptions, standards and procedures we establish here should help us, our licensees, and the affected public in advancing those goals.

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[127] Carriage of the Transmissions of Digital Television Broadcast Stations, CS Docket No. 98-120, *Notice of Proposed Rulemaking*, 13 FCC Rcd. 15092 (1998). We first sought and received comments addressing digital broadcast television carriage issues in 1995 in another docket. *See* Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, *Fourth Further Notice of Proposed Rulemaking and Third Notice of Inquiry*, 10 FCC Rcd. 10540 (1995).

[128] We note that most cable industry comments filed in the DTV Must Carry proceeding (CS Dkt. No. 98-120) objected to mandatory carriage of digital broadcast signals in addition to the existing mandatory carriage of analog signals during the transition. These comments did not object to carriage of digital only signals after the transition to DTV is completed and broadcasters' analog spectrum is returned. *See, e.g.,* Armstrong Holdings Inc. and Inter Mountain Cable Comments at 36 ("A broadcaster should only be able to convert must carry rights to its digital channel when it actually returns the analog channel to the Commission. . ."); *cf.* Paxson Communications *ex parte* filing, April 7, 2000 (Broadcast group owner's discussion paper on must carry requirement during digital transition). *See also,* NCTA Comments at 4 (focussing on objections to "double carriage obligations" (emphasis in original)), and Time Warner Cable Comments at 3 (drawing a distinction between mandatory carriage of digital signals during the transition, as opposed to digital carriage after a broadcaster has surrendered its analog spectrum). Nothing in Section 614 of the Communications Act, the "must carry" provision, limits that obligation to analog commercial television. *See* 47 U.S.C. § 534. *See also* NCTA *ex parte* filing, June 6, 2000, in WT Dkt. No. 99-168 ("may not be objectionable" for cable operator to continue to carry DTV programming, in analog format, on the same channel previously used for the analog signal, if provided an analog feed at the system headend).

[129] *DTV Fifth Report and Order*, 12 FCC Rcd 12809, 12856 (1997).

3. Regulatory Parity with New Broadcast-Type Services

67. **Background.** In the *700 MHz First Report and Order*, we determined that sharing this band between conventional television broadcasting and lower-power wireless services posed serious technical difficulties, but permitted other, unspecified broadcast-type services to be provided consistent with the Part 27 rules applicable to these bands.[130] We did not establish a regulatory structure for such offerings, noting that such services could differ significantly from existing, conventional broadcasting services.[131] ALTV argues on reconsideration that the Commission "must adopt an equivalent regulatory regime" for new services on these bands that are similar to broadcast television, and contends that to the extent the Commission applies a less regulated structure to new broadcast services on these channels, it should accord similarly relaxed treatment to stations operating on channels 2-59.

68. **Discussion**. We decline to develop an "equivalent regulatory regime" for broadcast-type services on these bands, as suggested by ALTV. ALTV's argument rests on the assumption that broadcast-type services that may arise on this band will sufficiently resemble conventional television broadcasting to justify comparable regulatory treatment of such new services. To the extent that new 700 MHz licensees provide services that qualify as broadcasting under the Communications Act, they will be subject to the statutory provisions of the Act governing broadcast service. Other 700 MHz broadcast-type services, however, may differ in significant respects from conventional television broadcasting, and it would be premature to determine at this juncture the application of Commission requirements and policies that are not specifically mandated by statute. As discussed above, the power limits originally adopted, and as revised herein, effectively preclude services that would be comparable, in either technical or operational terms, to existing conventional television broadcast services.[132] The geographic regions adopted for assigning licenses in this proceeding also differ significantly in scope from the "community of license" approach traditionally applied to broadcast licensees. Moreover, the record does not indicate what specific, "broadcast-type" services are actively contemplated, or the form they might take. Such services could include configurations ranging from subscription-based data services provided directly by wireless entities to, potentially, partnered arrangements involving incumbent broadcasters and new Part 27 licensees. As a result, we will not attempt at this juncture to anticipate the form or forms that the next generation of "broadcast-type" services on these bands may take, or to configure a regulatory structure on the basis of speculation, but will, as stated in the *700 MHz First Report and Order*, determine the applicable regulatory framework in the context of the offering of specific, actual services.

C. GUARD BANDS

69. **Background.** In the *700 MHz First Report and Order*, we established Guard Bands to protect the immediately adjoining public safety licensees on Channels 63, 64, 68, and 69 from harmful interference from operations on the 30 megahertz segment.[133] These Guard Bands consist of two paired 1 megahertz sub-bands at 746 MHz and 776 MHz and two paired 2

[130] *700 MHz First Report and Order*, 15 FCC Rcd at 483, 485-86 (paras. 15, 19).

[131] *700 MHz First Report and Order*, 15 FCC Rcd at 483-84 (para. 15 n.37).

[132] ALTV's petition addresses the regulation of conventional television and counterpart services on the 700 MHz band. It does not consider, and we do not here address, any issues that might arise when determining the regulatory status of broadcast-type, non-video services.

[133] *700 MHz First Report and Order*, 15 FCC Rcd at 490-91 (paras. 33-34).

megahertz sub-bands at 762 and 792 MHz.[134] In its Petition for Reconsideration, MSTV asserts that the Commission has not explained why guard bands advance its stated policy of protecting public safety licensees. MSTV contends that Guard Bands are inherently inimical to the highest-value use of spectrum, and that the Commission should protect public safety by enforcing emissions limits instead.[135]

70. **Discussion.** We continue to believe, as we stated in the *700 MHz First Report and Order*, that Guard Bands will enable us to protect adjacent public safety bands from harmful interference, while allowing for effective commercial use of the entire 36 megahertz of spectrum, consistent with sound spectrum management.[136] APCO, TRW, and others concur.[137] MSTV has provided inadequate technical support for its argument that Guard Bands will not protect the public safety bands and that the use of emission limits alone would afford the degree and certainty of protection required for public safety uses in adjacent bands. Moreover, we do not find the prior Commission orders cited by MSTV to be apposite. For instance, in the *5 GHz Allocation Fourth Report and Order*, we refused to consider the creation of guard bands as inconsistent with our earlier allocation decision for that band.[138] Here, by contrast, the creation of guard bands furthers our earlier allocation decision by enabling the effective and efficient use of the spectrum, consistent with the need to protect public safety operations in adjacent bands.

D. LICENSING RULES

1. Spectrum Cap

71. **Background.** In the *700 MHz First Report and Order*, we determined that the 747-762 MHz and 777-792 MHz bands should not count against the 45/55 megahertz spectrum cap if used to provide CMRS based on our perception that subjecting the existing 180 megahertz of CMRS spectrum to the CMRS spectrum cap provides a sufficient safeguard against consolidation of spectrum. We rejected the alternative of including this spectrum in the cap and then adjusting the cap upward. In our view, such an approach would facilitate reconsolidation within the present CMRS bands and prompt concern about reductions in competition and attendant increases in prices and diminution in the quality of services provided.

72. On reconsideration, Northcoast asks that we not exempt the 700 MHz spectrum from the spectrum cap, because exempting new 700 MHz licensees from the cap will put smaller operators at a disadvantage in bidding for 700 MHz spectrum against larger operators with a

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[134] In the *700 MHz Second Report and Order*, we adopted more stringent interference protection standards for these Guard Bands than we had adopted in the *700 MHz First Report and Order* for the 10 and 20 megahertz segments that do not directly abut public safety spectrum. *See 700 MHz Second Report and Order*, 15 FCC Rcd at 483-87, 515-17 (paras. 14-24, 98-101).

[135] MSTV Petition at 10-11.

[136] *700 MHz First Report and Order* 15 FCC Rcd at 491 (para. 34).

[137] *See, e.g.*, APCO Opposition at 3; TRW Consolidated Comments/Opposition at 8-9.

[138] We determined that the creation of guard bands would "effectively preclude . . . operations from spectrum that was allocated for such purposes," and would require additional notice and comment at the service rules stage of the proceeding. *5 GHz Allocation Fourth Report and Order*, 11 FCC Rcd at 13369-70 (para. 35).

substantial competitive position in the CMRS market.[139] Northcoast asserts the CMRS market has not changed so substantially in the intervening several months since we decided in the *Spectrum Cap Report and Order* to retain the spectrum cap,[140] to warrant the dramatic change adopted for the 700 MHz spectrum.[141]

73. **Discussion.** For the reasons set forth in the *700 MHz First Report and Order*,[142] we decline to adopt Northcoast's suggestion that we extend the CMRS spectrum cap to include 700 MHz spectrum. In that Order, we stated that the presence of the CMRS spectrum cap for the existing 180 megahertz of CMRS spectrum appears to provide a sufficient safeguard against consolidation of spectrum, and that next generation applications would benefit from those economies of scale provided by licensing on a national or large regional basis. In addition, we observed that it was unclear whether this spectrum will be used primarily or even substantially for CMRS services or for services that are competitive with CMRS, and that, in any event, the present level of encumbrance and the extended transition period provided for incumbent television broadcasters to move out of the band weighed against counting this spectrum against the current cap. Contrary to Northcoast's argument, this decision was not a dramatic change from our decision in the *Spectrum Cap Report and Order* but, rather, was specifically contemplated as a possible outcome in that *Order*.[143]

2. Geographic Area Licensing

74. **Background and Discussion.** In the *700 MHz First Report and Order* we determined to license both the 20 megahertz and the 10 megahertz licenses in the 700 MHz band based on the six EAGs.[144] On reconsideration, Rand McNally alleged that this constitutes an infringement of their copyright interest in Metropolitan Trading Area and Basic Trading Area

[139] Northcoast Petition at 3. No oppositions, comments or replies were filed on this issue.

[140] *See* 1998 Biennial Regulatory Review--Spectrum Aggregation Limits for Wireless Telecommunications Carriers, WT Docket No. 98-205, Cellular Telecommunications Industry Association's Petition for Forbearance from the 45 MHz CMRS Spectrum cap, Amendment of Parts 20 and 24 of the Commission's Rules--Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, WT Docket No. 96-59, Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, *Report and Order*, FCC 99-244 (rel. Sept. 22, 1999) 1999 WL 734848, at paras. 20-27, 66-67 (*Spectrum Cap Report and Order*).

[141] Northcoast Petition at 2.

[142] *See 700 MHz First Report and Order*, 15 FCC Rcd at 497-98 (para. 52).

[143] In our 1998 biennial review of the CMRS spectrum cap, we declined to increase the cap, except in those rural areas in which we determined that an increase was necessary to facilitate the deployment of CMRS. *See Spectrum Cap Report and Order* at paras. 20-27, 66-67.

[144] *700 MHz First Report and Order*, 15 FCC Rcd at 500 (para. 56).

listings.[145] Rand McNally subsequently made a filing to withdraw its Petition as moot,[146] which we grant in this Order.[147]

E. COMPETITIVE BIDDING

1. Auction Procedures

75. **Background.** In the *700 MHz First Report and Order*, we concluded that we would not implement a combinatorial bidding procedure in this auction.[148] We decided that although combinatorial bidding procedures could have significant benefits for the auction of licenses in this band, we declined to employ this type of auction because of the complexities of design and implementation of such bidding procedures, especially in light of the statutory auction deadline. We instead directed the Wireless Telecommunications Bureau to adopt a nationwide bid withdrawal procedure to limit the exposure of bidders seeking a 30 megahertz nationwide aggregation at auction, if operationally feasible.[149] On reconsideration, US WEST argues that our nationwide bid withdrawal provisions are not sufficiently flexible to accommodate the needs of bidders not attempting to acquire a 30 megahertz nationwide license.[150]

76. **Discussion.** The modified bid withdrawal procedure we outlined in the *700 MHz First Report and Order*, was intended to accommodate bidders facing the greatest exposure under the standard bid withdrawal rule, *i.e.*, those seeking a 30 megahertz nationwide license through aggregation. Modifying our procedures to accommodate bidders attempting to acquire a combination of licenses other than a 30 megahertz nationwide combination, as US WEST advocates, would present issues of both auction policy and our implementation capabilities. We note, however, that there has been significant progress in the design and testing of a combinatorial bidding system since our adoption of the *700 MHz First Report and Order*. The Wireless Telecommunications Bureau recently issued a Public Notice seeking comment on a specific combinatorial bidding design for the auction of licenses in the 747-762 and 777-792 MHz bands.[151] With the delay of the auction and the continued progress in the design and testing of a combinatorial bidding system, we now believe, contrary to our conclusion in the *700 MHz First Report and Order*, that sufficient time may exist to implement combinatorial bidding. We, therefore, no longer wish to rule out the use of a combinatorial bidding design for that auction.

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[145] Rand McNally Petition at 1. The Commission received no oppositions, comments or replies on this issue.

[146] *See* Rand McNally filing of April 18, 2000.

[147] *See* Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80, 87,90, 95, 97 and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, WT Docket No. 98-20, WT Docket No. 96-188, RM-8677, *Report and Order*, 13 FCC Rcd 21027 (1998) (*ULS Report and Order*).

[148] *See 700 MHz First Report and Order*, 15 FCC Rcd at 527 (para.124).

[149] *See 700 MHz First Report and Order*, 15 FCC Rcd at 527 (para.126).

[150] US WEST Petition at 4.

[151] Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for September 6, 2000, Comment Sought On Modifying the Simultaneous Multiple Round Auction Design to Allow Combinatorial (Package) Bidding, *Public Notice*, DA 00-1075, released May 18, 2000 ("*Package Bidding Comment PN*").

Accordingly, the Wireless Telecommunications Bureau may implement such a design under its existing delegated authority if, after review of the comments, it finds combinatorial bidding to be appropriate and feasible.[152]

77. In light of these new developments, we decline to decide at this time the issues raised by US WEST regarding the nationwide bid withdrawal procedure. Instead, after the Bureau has reviewed the record developed in response to the Public Notice and determined whether or not to implement a combinatorial bidding design in this auction, we will revisit the issues generally raised by US WEST in a further reconsideration order to be adopted prior to the due date for the filing of short forms and adopt any necessary rule changes.[153]

2. Exclusion of Small Businesses

78. **Background.** In the *700 MHz First* Report *and Order*, we adopted for the 746-764 MHz and 776-794 MHz bands a definition of a small business as any entity with average annual gross revenues for the three preceding years not in excess of $40 million, and a definition of a very small business as an entity with average annual gross revenues for the three preceding years not in excess of $15 million.[154] To facilitate these entities' participation in the auction, we accorded small businesses a 15 percent bidding credit and very small businesses a 25 percent bidding credit.[155] We noted that small businesses could participate in the auction as part of a consortium of service providers, and that our partitioning and disaggregation rules offer licensees sufficient flexibility to assign unused spectrum to others, including small businesses.[156] On reconsideration, Nelson Repeater Services contends that the large service territories and spectrum blocks, coupled with the spectrum's propagation characteristics and flexible usage requirements, will attract the larger competitors and constitute a *de facto* exclusion of small businesses from the 700 MHz licensing process.[157] Nelson asserts that, even with a 25 percent discount, a $150 million EAG will cost ten times the annual revenue cap for a very small business, that consortia formation involves significant transaction costs and risks, and that the Commission should redraw the geographic territories, reduce the size of the spectrum blocks, and/or set aside a portion of the 700 MHz spectrum for exclusive bidding by smaller businesses.[158]

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[152] Amendment of Part 1 of the Commission's Rules – Competitive Bidding Proceeding, WT Docket No. 97-82, *Order, Memorandum Opinion and Order and Notice of Proposed Rule Making*, 12 FCC Rcd 5686, 5697-98 (para. 16) (1997).

[153] For instance, we note that in the *Package Bidding Comment PN*, the Bureau sought comment on modifications to the general competitive bidding default payment rule, 47 C.F.R. § 1.2104(g)(2).

[154] *See 700 MHz First Report and Order*, 15 FCC Rcd at 529-30 (para. 133).

[155] *See* 47 C.F.R. § 1.2110(e)(2)(iii) and § 1.2110(e)(2)(ii), respectively.

[156] We noted that the consortium must observe the Commission's Rules, including Section 1.2105(a), which requires that consortium applicants identify all consortium members and any agreements relating to the post-auction market structure, and the anti-collusion provisions of Section 1.2105(c). *See* 47 C.F.R. § 1.2105(a)(2)(viii); 47 C.F.R. § 1.2105(c).

[157] Nelson Petition at 1-2. Nelson provides SMR services in Phoenix and characterizes itself as a "very small business."

[158] *Id.* at 4-5.

79. **Discussion.** We decline to modify the auction rules as Nelson suggests. The definitions we have adopted for small and very small businesses parallel those previously applied to broadband PCS, 2.3 GHz, and 39 GHz applicants.[159] The provision of bidding credits to promote opportunities for small business participation in spectrum auctions has been upheld in *Fresno*,[160] and the 15 and 25 percent tiered bidding credits are consistent with the levels adopted in the Part 1 proceeding.[161] Although we solicited comment on the capital costs associated with operating in the 700 MHz bands, we received no responses, and Nelson's petition provides no material evidence that our structure of the auction, in terms of spectrum block and geographic area size or the size standards and bidding credits adopted, effectively precludes all small business participation in the 700 MHz auction, including as possible members of consortia.

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

80. As noted in the *Memorandum Opinion and Order*, the 700 MHz band potentially can be used for fixed broadband services and a variety of third generation mobile services. While higher frequency bands might also be used for these purposes, the 700 MHz band provides superior propagation characteristics (reduced signal loss through buildings, vegetation and other obstructions) and allows use of lower cost technology than higher bands. These advantages may be vitally important to the viability of wireless as a competitor with DSL and cable modem services. These considerations have led us to implement policies in the *First Report and Order* and the *Memorandum Opinion and Order* that will facilitate voluntary band-clearing agreements between 700 MHz licensees and TV incumbents.[162]

81. In addition to encouraging individual band-clearing agreements, there may be additional steps we can take to facilitate the band-clearing process. In this *Further NPRM*, therefore, we seek comment on the following potential mechanisms to further the goals of transitioning the 700 MHz band to wireless services. First, we seek comment on whether or not we need to adopt cost-sharing rules that would spread the cost of band clearing among 700 MHz licensees that benefit from the process. Second, we seek comment on additional voluntary band clearing mechanisms that would provide alternatives to individually negotiated agreements between 700 MHz licensees and incumbent broadcasters in the 700 MHz band. One such alternative would be "three-way" agreements that would provide for TV incumbents in the 700 MHz band to relocate to lower band TV channels that would be voluntarily cleared by the lower band TV incumbent. Another alternative would be to allow use of "secondary auctions" in which 700 MHz bidders would bid for the right to enter into band clearing arrangements with TV incumbents that wished to clear their channels. We seek comment on the viability of these and other alternatives for facilitating the voluntary clearing of TV Channels 59-69 in connection with the upcoming auction of licenses for this portion of the spectrum. In addition, we seek comment on whether any or all of these mechanisms could be used to facilitate band clearing of Channels 52-58 in connection with our future licensing of this lower portion of the spectrum for wireless services.

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[159] *See* 47 C.F.R. § 24.720(b); 47 C.F.R. § 27.210(b); 47 C.F.R. § 101.1209(b).

[160] Fresno Mobile Radio, Inc. v FCC *et al*., 165 F.3d 965 (D.C. Cir. 1999) (*Fresno*).

[161] *See Part 1 Third Report and Order*, 13 FCC Rcd at 403-04, paras. 47-48.

[162] *First Report and Order* at para. 145.

A. COST-SHARING RULES

82. We seek comment on whether cost-sharing rules would expedite clearing the 700 MHz band for use by the new licensees and the transition to DTV by incumbent broadcasters, or whether, as we tentatively conclude, cost-sharing arrangements should be left to negotiations among successful auction bidders. When a 700 MHz licensee reaches a voluntary agreement with a TV incumbent to clear its channel ("clearing agreement"), other 700 MHz licensees may benefit from the agreement as well.[163] We have at times relied on cost-sharing rules to assist in clearing other bands, enabling faster deployment of new services.[164] We tentatively conclude that it would not be necessary or appropriate to adopt cost-sharing rules in this proceeding, but seek comment on the following issues: Would cost-sharing rules be useful or necessary to assist in clearing the 700 MHz band? If we do adopt cost-sharing rules, how should we calculate the costs that benefiting 700 MHz licensees would be required to pay?

83. We note initially our belief that the new 700 MHz licensees may very well enter into cost-sharing agreements without Commission rules. First, because the 700 MHz band has been allocated based on large spectrum blocks and regional licenses, the number of licensees that benefit significantly from any particular clearing agreement will be small.[165] Thus, the licensees may be easily able to bargain among themselves to reach cost-sharing agreements. Second, because the license areas (EAGs) are large, there may be many TV incumbents that will need to be relocated in order for each 700 MHz licensee to commence operations. This factor may provide a large incentive among 700 MHz licensees to reach comprehensive cost-sharing agreements that provide for the clearing of multiple TV incumbents. For this and other reasons, licensees may see the free-rider issue as more-or-less symmetrical, making it more likely that they will reach cost-sharing agreements. Third, licensees will acquire their licenses at the same time. Thus, in contrast to PCS, where different bands were licensed sequentially, 700 MHz licensees will know with whom they need to bargain to reach cost-sharing agreements. Finally, again in contrast to the 2 GHz licensees, 700 MHz licensees are more likely to be ready to deploy their services at the same time. Thus, the incentives to reach a clearing agreement with a TV incumbent are more likely to be similar among the licensees, therefore providing additional incentives to reach cost-sharing agreements. In light of these factors, we tentatively conclude that we should rely on market forces to produce any desirable cost-sharing relationships, but seek comment on whether cost-sharing rules are necessary or would be useful to assist licensees in reaching clearing agreements with TV incumbents.

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[163] For example, reaching a clearing agreement with one incumbent licensee may benefit other 700 MHz licensees using the TV incumbents' operating channel and licensees using the adjacent channels. A review of the 700 MHz band plan shows, for example, that clearing Channel 60, 61, 65 or 66 will benefit both of the major commercial licensees within an EAG (as well as possibly benefiting the guard band and public safety licensees). Further, the Grade B contour of a cleared station might lie within two EAGs and clearing the station will therefore benefit the licensees in both EAGs.

[164] *See* Amendment to the Commission's Rules Regarding A Plan for Sharing the Costs of Microwave Relocation, WT Dkt. No. 95-157, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8825 (1996) (*Cost Sharing First Report and Order and Further NPRM*), *Second Report and Order*, 12 FCC Rcd 2705 (1997); Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Second Report and Order*, 12 FCC Rcd 19079, 19114-26 (paras. 96-132) (1997).

[165] Because we tentatively conclude not to require public safety licensees to pay a share of the clearing costs, *see infra* para. 85, in most cases there will be only one or two other licensees who will share in the costs.

84. If commenters recommend the adoption of cost-sharing rules, they should comment on how we should calculate the costs that benefiting 700 MHz licensees would be required to pay. In particular, such issues would include: which 700 MHz licensees should be required to pay a share of the clearing costs; how to calculate each licensee's share of the clearing costs;[166] and how to calculate the overall costs we would require licensees to share. Such commenters should also comment on whether all licensees that operate within the Grade B contour on either the cleared channel or the two adjacent channels of a TV incumbent should be required to pay a pro rata share of any clearing costs paid to that incumbent. Also, should guard band licensees be required to pay a share of the clearing costs, and, if so, should their share should be adjusted for the fact that their use of the spectrum is more limited than that of the other commercial licensees? Parties should also discuss whether we should place a cap on the amount of shared costs and, if so, what that cap should be.[167] Finally, commenters recommending adopting cost-sharing rules should comment on whether we should consider waivers of any cost-sharing requirements for new service providers that employ technology that is capable of sharing the 700 MHz band without interfering with broadcast transmissions.

85. We also tentatively conclude, however, that under any cost-sharing mechanism we might adopt, licensees of the 700 MHz public safety spectrum would not be required to pay a share of the clearing costs. We believe that it would be inconsistent with the public interest to impose such a mandatory burden on public safety licensees, and that that public safety licensees are unlikely to have the financial ability to pay a share of the clearing costs. Also, we believe that imposing large additional costs on public safety licensees could harm their ability to protect the public safety. We seek comment on this tentative conclusion.

B. ADDITIONAL BAND CLEARING PROPOSALS

86. We seek comment on whether there are other mechanisms we could implement to facilitate voluntary band clearing. In particular, we seek comment on whether there are market-oriented mechanisms that might be more efficient to facilitate voluntary band clearing than the negotiation of individual band clearing agreements by each 700 MHz licensee and each TV incumbent.

1. Three-Way Voluntary Transition Agreements.

87. We first seek comment on whether, and under what conditions, we should consider requests to approve three-way clearing agreements that would provide for TV incumbents on television Channels 59-69 to relocate to lower band TV channels that, in turn, would be voluntarily cleared by the lower band TV incumbents. Pursuant to such agreements, the lower band broadcasters would give up one of their two channel allotments (either analog or digital), to which the Channel 59-69 incumbents would then move their operations. Such three-way

[166] For example, each licensee's share could be proportionate to the amount of spectrum authorized to the licensee. Alternatively, each share could be proportionate to, or adjusted for, the geographic area in which the licensee would be enabled to provide service by the clearing agreement, or by the population of such area.

[167] In this regard, we note that because TV incumbents are not required to cease operations until, at the earliest, December 31, 2006, the significant costs to the TV incumbents of clearing the band before they are required to do so likely will not be the "hard" costs of changing equipment or advertising their new channel but the "soft" costs of lost profits.

voluntary relocation agreements could facilitate clearing in the 700 MHz band by providing a replacement ("relocation") channel for incumbent broadcasters on Channels 59-69.[168]

88. In considering three-way transactions, we note that different considerations arise depending on whether the relocation channel is analog or digital. Where the relocation channel is analog, the lower band broadcaster who provides that channel would make an early transition to DTV operations, thus freeing up its analog channel to be used to relocate either an analog or digital incumbent from television Channels 59-69. Where the relocation channel is digital, the broadcaster who provides that channel would retain its analog allotment, and the Channel 59-69 TV incumbent would begin operations on the digital channel that the first operator will no longer utilize. The Commission could then permit the lower band broadcaster to switch to digital transmission on its analog channel on a date certain. In both cases, the new 700 MHz licensee would voluntarily negotiate with and, we assume, compensate both the broadcaster who provides the relocation channel and the Channel 59-69 TV incumbent who moves to the relocation channel.

89. In general, we are seeking comment on voluntary three-way agreements that would involve an incumbent in the Channel 59-69 band relocating to a "core" channel between Channels 2 and 51, which is not subject to future licensing for wireless services. We also seek comment, however, on whether we should permit three-way agreements where the relocation channel is in the Channel 52-58 band, which will be subject to such future licensing. If we permitted such relocations, they would obviously be interim in nature, because the incumbent relocating to the Channel 52-58 band would ultimately have to clear that channel. We recognize that requiring an incumbent to relocate twice could result in duplicative costs, additional disruption to viewers, and other inefficiencies. On the other hand, this alternative could provide more options for clearing incumbents on Channels 59-69, and it would not add to the number of incumbent stations that would ultimately have to be cleared from Channels 52 to 58 (because the incumbent clearing the 52-58 channel as part of the three-way agreement would otherwise have to be cleared eventually). We seek comment on whether potential benefits of allowing interim relocation to Channels 52 to 58 are sufficient to outweigh the potential costs.

90. We also seek comment on how we should evaluate possible loss of service in reviewing specific requests for voluntary relocations. To the extent that the Channel 59-69 incumbent's programming continues to be provided on a relocation channel after such a voluntary agreement, the loss of service analysis discussed in the *Memorandum Opinion and Order* would presumably need to be applied not only to individuals within the service area of the Channel 59-69 incumbent, but also – separately – to individuals within the service area of the relocation channel.

91. People within the service area of the Channel 59-69 incumbent may in some cases lose service because the incumbent chooses to move to the relocation channel's facilities, or because the grade B contour of the incumbent changes when operating on a different channel

[168] We note that in the event that, in a three-way voluntary agreement, a Channel 59-69 incumbent employs a lower band incumbent's exact facilities (*i.e.*, same location, same power, same antenna height), no interference issues would arise. However, if a Channel 59-69 incumbent seeks to operate either at a different location or with different technical parameters than a lower band incumbent, there could be a possibility for interference to other TV stations. We would therefore require all such requested station assignments to be in full compliance with prescribed interference criteria (*i.e*., minimum required distance separations with respect to other TV stations), and would address each such proposed assignment on a case-by-case basis.

from its own facilities. In this case, the loss of service analysis would be similar to that for two-way clearing agreements. Separately, for people within the service area of the relocation channel (including people who initially received the signals of both the relocation channel and incumbent channel), the analysis would apply to loss of programming that was previously provided by the lower band relocation channel. This loss of service analysis would also be similar to that for two-way clearing agreements, except that it would be applied to the individuals located within the service area of the relocation channel (as opposed to those individuals within the service area of the Channel 59-69 incumbent channel). In addition, in some cases, the loss of service analysis may need to be supplemented to account for the substitution of the incumbent's programming for the programming that was previously available on the relocation channel.[169] We seek comment on this analysis.

92. Assuming that we agree to consider requests to permit voluntary three-way clearing agreements to facilitate clearing in the 700 MHz band, we seek comment on whether any cost-sharing rules that might be established pursuant to the first section of this *Further NPRM* should apply to those agreements as well. Also, some commenters have suggested that we consider steps other than the review of voluntary agreements.[170] We will entertain comment on whether reliance on voluntary agreements will be adequate.

2. Secondary Auctions

93. To assist our effort to clear the 700 MHz band for new services and accelerate the transition to DTV, we also seek comment on whether, in conjunction with this or future auctions in the band (*e.g.*, our auction of the Channel 52-59 MHz spectrum), some form of "secondary auction" could be used to facilitate band clearing agreements.[171] In a secondary auction, competitive bidding would be used to determine the price that would be paid by 700 MHz licensees to TV incumbents who agree to clear their channels in the 700 MHz band. Such an auction could be organized and conducted on a private basis, as proposed by Spectrum Exchange, or could be conducted by the Commission. We discuss each of these alternatives below.

94. In its comments in this proceeding and in its recently filed petition for rulemaking, Spectrum Exchange argues in favor of conducting a private voluntary auction for clearing the spectrum.[172] Under Spectrum Exchange's proposal, the private auction would occur in advance of the auction of 700 MHz licenses, and would be arranged by agreement among prospective 700 MHz bidders and TV broadcasters (both incumbents in the 700 MHz band and broadcasters with "comparable" UHF stations below channel 59). The 700 MHz bidders that participated in the private auction would agree to pay for band-clearing of participating TV incumbents at the price

[169] *See supra MO&O*, paras. 60-65.

[170] *See* Spectrum Exchange Group, L.L.C., Petition for Rule Making at 11-16 (filed Apr. 24, 2000) ("Spectrum Exchange Petition"); *see also* Paxson *ex parte* filing of May 3, 2000 at 1-2 and Attachment; Paxson *ex parte* filing of May 26, 2000 at 1-2.

[171] Because secondary auction options discussed here would have to occur prior to or simultaneously with the auction of 700 MHz licenses, and because of the imminence of the 700 MHz auction for spectrum previously allocated to TV channels 60-69, we ask for comment on whether it is feasible to implement these proposals for that auction. We note that the Commission plans to hold a future auction for additional spectrum in the 700 MHz band previously allocated to TV channels 52-59, and therefore seek comment on secondary auctions in that context as well.

[172] Spectrum Exchange Opposition at 4.

determined by the auction, plus an "incentive" payment to the 700 MHz incumbents for their commitment to relocate. A "descending clock" auction would be used, *i.e.*, the price would start at a high level, and the broadcasters with comparable coverage areas would then bid against one another to determine who would be willing to accept the lowest price to clear. The auction would end when the number of comparable UHF stations remaining in the auction was equal to the number of UHF channels that needed to be cleared in the 700 MHz band, thus identifying the lowest price at which the required number of incumbents would be willing to clear the band. The winning bidders would then enter into the necessary two-way or three-way clearing agreements to carry out clearing of the band in accordance with the auction results.

95. Spectrum Exchange contends that this form of private secondary auction would facilitate band-clearing because it would use competitive market forces to determine band-clearing costs and would provide 700 MHz bidders with certainty regarding those costs in advance of the auction of 700 MHz licenses.[173] We seek comment on Spectrum Exchange's proposal, and particularly on how it would work in conjunction with the band-clearing procedures we have adopted in the *Memorandum Opinion and Order* and the additional band-clearing proposals discussed in this *Further NPRM.*

96. As an alternative to Spectrum Exchange's proposal, we seek comment on another form of secondary auction that could be conducted by the Commission. Under this alternative, any TV incumbent in the 700 MHz band that wished to enter into a band clearing agreement would offer an "option" obligating it to clear the band if the option is purchased by a winning 700 MHz bidder. The option would, at a minimum, include a promise to clear the band within a specified time after the option was exercised (*e.g.*, one year) in exchange for a set payment. The secondary auction would take place simultaneously with the auction of 700 MHz licenses. Bidders in the 700 MHz auction would bid in the secondary auction for the right to exercise these options and enter into band clearing agreements with participating incumbents at some time in the future.[174] The secondary auction winner would not be required to exercise the options it won at auction, but whether or not it did so, participating TV incumbent would retain the proceeds from the winning bids.

97. We believe that either type of secondary auction discussed above could produce significant benefits. A secondary auction could reduce the financial risk to 700 MHz bidders by allowing them to determine up front the cost of clearing the band early (at least in those markets where the TV incumbent decided to participate). Secondary auctions could also significantly reduce the parties' transaction costs of entering into band clearing agreements, because the cost of an auction involving multiple parties would be relatively small compared to the cost of individual 700 MHz bidders or licensees separately negotiating agreements (either before, during, or after the auction) with each incumbent.

98. Finally, secondary auctions could increase the likelihood that the parties will actually reach a band clearing agreement, to the mutual benefit of all involved. As a general matter, in those portions of an EAG where there are multiple TV incumbents who must clear the spectrum before the new 700 MHz licensee is able to offer service, the new 700 MHz licensee might be

[173] Spectrum Exchange Petition at 9-11.

[174] The new 700 MHz licensee would be able to exercise the option at any time within a specified time frame (*e.g.*, until the DTV transition period terminates), although the TV incumbent would not be required to actually clear the band until the date specified in the option.

reluctant to enter into a band clearing agreement with any one of the TV incumbents without some assurance that it will be able to reach band clearing agreements with most (or all) of the other incumbents. If Channel 59-69 TV incumbents participated in the secondary auction, 700 MHz bidders would have certainty with respect to their ability to clear the band (or a portion of the band). Moreover, the secondary auction would enhance a bidder's ability to enter into clearing agreements with *all* incumbents that precluded its use of a portion of a spectrum block, which could be collectively more valuable than individual agreements with some but not all incumbents. A secondary auction should thus both increase the price a TV incumbent receives to clear the band and increase the likelihood that the band will actually be cleared.

99. We do not propose requiring TV incumbents to participate in such auctions, whether run privately or by the Commission. Rather, the auctions would merely make available another, and less costly, mechanism for TV incumbents to reach voluntary band-clearing agreements with new 700 MHz licensees. Moreover, as stated in the *First Report And Order,* we will consider regulatory requests necessary to implement voluntary band-clearing agreements on a case-by-case basis. We intend to apply this case-by-case analysis regardless of whether such agreements are the product of individual negotiation or a secondary auction. Thus, if we adopt some form of secondary auctions, we would still make an independent determination with respect to each agreement resulting from the auction whether granting the regulatory request necessary to implement the agreement was in the public interest.

100. As an initial matter, we seek comment whether we have the legal authority to conduct secondary auctions. We note that the secondary auction proposals discussed above would involve bidding on contractual options, not spectrum licenses, and that the proceeds of the secondary auction would go to TV incumbents rather than to the U.S. government. We therefore seek comment on whether Section 309(j) of the Act, which specifies that we have authority to auction "initial" licenses, extends to a Commission-sponsored auction of band clearing options that would be associated with the award of 700 MHz licenses. We also seek comment on whether other provisions of the Act, *e.g.*, Section 4(i), confer authority on the Commission in this regard.

101. Assuming that we have legal authority to conduct secondary auctions, we seek comment on how such auctions should be administered. We envision that while we would generally adopt our Part 1 auction rules to govern secondary auctions, we would need to make some changes to accommodate their distinctive nature. We seek comment on what changes to our auction rules and procedures might be necessary. For example, unless a party wins a related 700 MHz license (one encumbered by the broadcaster selling the option), having an option to clear a TV incumbent would be of no direct value.[175] Therefore, we envision that winning an option in the secondary auction would be contingent on winning a related 700 MHz license. If a winning 700 MHz bidder did not also win the secondary auction, the option would be sold to no one. Thus, contingent bidding would allow bidders to bid without fear that they might be required to pay a large bid withdrawal payment in the secondary auction in the event they did not also win a related license in the 700 MHz auction. We also believe that the fear of no one acquiring a clearing option would create incentives for 700 MHz bidders to bid vigorously for the

[175] It is true that the option might have some value to the party if it was able to then sell it. However, all possible users of the option (the holders of the related new 700 MHz licenses) were free to have bid in the secondary auction and chose not to outbid the winner. Therefore, we believe that either the winner would not be able to sell the option except at a loss, or it bid on the option for the purpose of denying it to the 700 MHz license winners in an effort to increase their costs of clearing the band. Since the latter possibility is not one that we wish to encourage, we believe that the better course is to limit bidding on a clearing option to parties who are active on a related 700 MHz license.

options. Finally, to minimize the risk to incumbents that 700 MHz bidders would tacitly collude to obtain the option at an artificially low price, we believe that incumbents should be allowed to bid on their own options. We seek comment on these proposals.

102. It is also important for us to ensure that parties not participate in the secondary auction for improper purposes. Therefore, we believe that parties who are not active in the auction (have a standing high bid or an accepted new bid) on a related 700 MHz license should not be allowed to participate in the secondary auction. Otherwise, parties might drive up the price of the option only for the purpose of harming their competitors. This rule would apply to each individual round of the auction; if a party dropped out of the bidding for a new 700 MHz license, it would no longer be permitted to bid in the related secondary auction. While our bid withdrawal procedures usually provide an appropriate safeguard against such behavior, as just discussed, participants in the secondary auction would not face the risk of any withdrawal penalties because their bids would be contingent on winning a related 700 MHz license. Similarly, we expect that we would prohibit jump bidding in the secondary auction. This would prevent a participant who expects to lose in the 700 MHz auction from acting to drive up or deny the option to the winning 700 MHz bidder, again with no financial risk to itself.

103. We seek comment on the above proposals. We note that even if we implement secondary auctions as described above, we envision that 700 MHz bidders and licensees and the TV incumbents would always be free to reach band clearing agreements outside of the auction. We seek comment on the advantages and disadvantages of a Commission-run secondary auction for band clearing purposes in comparison to a private band-clearing auction held prior to the primary auction of 700 MHz licenses, *e.g.*, the Spectrum Exchange proposal discussed above.[176] We also seek comment on how we should address the situation where we do not approve the regulatory requests necessary to implement a voluntary band-clearing agreement that results from an auction. For example, should the winning bidder still be required to pay the TV incumbent? In addition to addressing these issues, parties should address whether the price paid by the winning bidder should be covered by any cost-sharing rules we might adopt, as discussed above.

3. Additional Proposals to Accelerate the Digital Television Transition.

104. We also seek comment on whether additional proposals should be considered to accelerate the digital television transition. For instance, should the Commission allow incumbent broadcasters on television Channels 59-69 and 700 MHz new service providers to share spectrum in time and/or bits? This proposal would preserve broadcast service while also providing opportunity for new service providers to commence service. In addition, sharing arrangements may assist broadcasters in rapidly transitioning to digital service. Similarly, we request comment on whether the FCC should allow broadcasters to share DTV facilities and spectrum during the transition. This proposal would help facilitate clearing in-core channels for relocation of television operations on out-of-core channels.

4. Band Clearing Relating to the Auction of Channels 52-59.

105. Some commenters have suggested that the Commission adopt regulations to facilitate band clearing and the DTV transition in conjunction with the auction of spectrum currently used by Channels 52-59. We therefore seek comment on how we should apply the standards we have adopted today in the *Memorandum Opinion and Order* and whether and how we should adapt to that auction the various proposals relating to the Channel 60-69 auction on which we are seeking today in this FNPRM. For instance, we seek comment on whether any of

[176] *See supra* paras. 94-95.

the enhanced band clearing proposals discussed in this Further Notice for incumbents on Channels 59-69 should also apply to incumbents on Channels 58 or lower.

V. PROCEDURAL MATTERS AND ORDERING CLAUSES[177]

106. An Initial Regulatory Flexibility Analysis with respect to the *Further Notice of Proposed Rule Making* has been prepared and is included in Appendix C.

107. Alternative Formats. Alternative formats (computer diskette, large print, audio cassette and Braille) are available to persons with disabilities by contacting Martha Contee at (202) 418-0260, TTY (202) 418-2555, or at mcontee@fcc.gov. This *Report and Order and Further Notice of Proposed Rulemaking* can also be downloaded at http://www.fcc.gov/cib/dro/.

108. Pleading Dates. Pursuant to Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on before August 16, 2000, and reply comments on or before September 15, 2000. 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. 24,121 (1998).

109. 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 appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address." A sample form and directions will be sent in reply.

110. 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 this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W., TW-A325, Washington, D.C. 20554.

111. Authority. This action is taken pursuant to Sections 1, 4(i), 7, 10, 201, 202, 208, 214, 301, 303, 307, 308, 309(j), 309(k), 310, 311, 315, 316, 317, 319, 324, 331, 332, 336, 337 and 614 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 157, 160, 201, 202, 208, 214, 301, 303, 307, 308, 309(j), 309(k), 310, 311, 315, 316, 317, 319, 324, 331, 332, 336, 337, and 534, and the Consolidated Appropriations Act, 2000, Pub. Law 106-113, 113 Stat. 1501, Section 213.

[177] With respect to the Memorandum Opinion and Order portion of this document, pursuant to Pub. Law 106-113, 113 Stat. 1501, Appendix E, Section 213, Chapter 6 of Title 5, United States Code, Section 3 of the Small Business Act (15 U.S.C. § 632), and Sections 3507 and 3512 of Title 44, United States Code, shall not apply to this proceeding.

112. Accordingly, IT IS ORDERED that Part 27 of the Commission's Rules IS REVISED ON RECONSIDERATION to modify service rules for the 747-762 MHz and 777-792 MHz bands, as set forth in Appendix B, and that, in accordance with Section 213 of the Consolidated Appropriations Act, 2000, Pub. Law 106-113, 113 Stat. 1501 (1999), these Rules shall be effective immediately upon publication in the Federal Register.

113. IT IS FURTHER ORDERED that the Petitions for Reconsideration filed by ArrayComm, Inc., the Association of Local Television Stations, Inc., the Association for Maximum Service Television, Inc., the Association of Public- Safety Communications Officials-International, Inc., the Federal Law Enforcement Wireless Users Group, the National Association of Broadcasters, Nelson Repeater Services, Inc., Northcoast Communications, LLC, and the U.S. GPS Industry Council ARE DENIED; that the Petitions for Reconsideration filed by Adaptive Broadband Corporation, TRW, Inc., and US WEST Wireless, LLC ARE GRANTED, to the extent indicated above, and ARE OTHERWISE DENIED; and that the request by Rand McNally & Company to withdraw its Petition for Reconsideration IS GRANTED.

114. IT IS FURTHER ORDERED that NOTICE IS HEREBY GIVEN of the proposed regulations described in the *Further Notice or Proposed Rulemaking*, and that comment is sought on these proposals.

115. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act of 1980, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. §§ 601-612 (1980).

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

APPENDIX A

PETITIONS FOR RECONSIDERATION

Adaptive Broadband Corporation (Adaptive)
ArrayComm, Inc. (ArrayComm)
Association of Local Television Stations, Inc. (ALTV)
Association for Maximum Service Television, Inc. (MSTV)
Association of Public- safety Communications Oficials-International, Inc. (APCO)
Federal Law Enforcement Wireless Users Group (FLEWUG)
National Association of Broadcasters (NAB)
Nelson Repeater Services, Inc. (Nelson)
Northcoast Communications, LLC (Northcoast)
Rand McNally & Company (Rand McNally)
TRW, Inc. (TRW)
U.S. GPS Industry Council (USGPS)
US WEST Wireless, LLC (US WEST)

Oppositions/Comments

ArrayComm
APCO
Bell Atlantic Mobile, Inc. (BAM)
FLEWUG
Motorola
Spectrum Exchange Group, LLC (SEG)
TRW
US WEST

Reply Comments

Adaptive
AirTouch Communications, Inc. (AirTouch)
MSTV
APCO
BellSouth Corporation (BellSouth)
GTE Service Corporation (GTE)
Motorola
NAB
TRW
USGPS

***Ex Parte* Filings**

Adaptive
ALTV
AMTA
ArrayComm

APCO
BellSouth
ITA
NAB
National Cable Television Association (NCTA)
Paxson Communications Corporation (Paxson)
Public Safety Wireles Network (PSWN)
SEG
Verizon Wireless (Verizon)

APPENDIX B

FINAL RULES

For those reasons discussed in the accompanying Order, Part 27 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 27 – WIRELESS COMMUNICATIONS SERVICE

1. The authority citation for part 27 continues to read as follows:

Authority: 47 U.S.C. 154, 301, 302, 303, 307, 309 and 332.

2. Section 27.50 is amended by revising paragraph (b), and the heading of Table 1, which follows paragraph (c), to read as follows:

§ 27.50 Power and antenna height limits.

* * * * *

(b) The following power and antenna height limits apply to transmitters operating in the 746-764 MHz and 776-794 MHz bands:

(1) Fixed and base stations transmitting in the 746-764 MHz band and the 777-792 MHz band must not exceed an effective radiated power (ERP) of 1000 watts and an antenna height of 305 m height above average terrain (HAAT), except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts ERP in accordance with Table 1 of this section;

(2) Control stations and mobile stations transmitting in the 747-762 MHz band and the 776-794 MHz band are limited to 30 watts ERP;

(3) Portable stations (hand-held devices) transmitting in the 747-762 MHz band and the 776-794 MHz band are limited to 3 watts ERP;

(4) Maximum composite transmit power shall be measured over any interval of continuous transmission using instrumentation calibrated in terms of RMS-equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, etc., so as to obtain a true maximum composite measurement for the emission in question over the full bandwidth of the channel.

* * * * *

Table 1 – Permissible Power and Antenna Heights for Base and Fixed Stations in the 746-764 MHz and 777-792 MHz Bands

* * * * *

3. Section 27.53 is amended by revising paragraph (c) to read as follows, removing paragraph (d), and redesignating paragraph (e) as paragraph (d), redesignating paragraph (f) as paragraph (e), redesignating paragraph (g) as paragraph (f):

§ 27.53 Emission limits.

* * * * *

(c) For operations in the 747 to 762 MHz band and the 777 to 792 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 747 to 762 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
(2) On any frequency outside the 777 to 792 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;
(3) On all frequencies between 764 to 776 MHz and 794 to 806 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;
(4) On all frequencies between 764 to 776 MHz and 794 to 806 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;
(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;
(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

* * * * *

4. Section 27.60 is amended in paragraph (b)(2)(i) by removing the phrase “746-764 MHz band” and adding the phrase “746-764 MHz and 777-792 MHz bands” in its place, and in paragraph (b)(2)(ii) by removing the phrase “776-794 MHz band” and adding the phrase “776-777 MHz and 792-794 MHz bands and control and mobile stations (including portables) that operate in the 747-762 MHz and 777-792 MHz bands” in its place.

APPENDIX C

INITIAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act (RFA),[1] the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by policies and rules proposed in the *Further Notice of Proposed Rule Making* (*Further Notice*) that relate to assignments of frequencies in the 698-746 MHz band (currently used for television broadcasts on Channels 52-59). Pursuant to the Consolidated Appropriations Act, 2000, the requirements of the RFA do not apply to the rules and competitive bidding procedures governing assignments to commercial entities of frequencies in the 746 MHz to 806 MHz band (currently used for television broadcasts on Channels 60-69).[2] Accordingly, we need not discuss any economic impacts that might result from such rules and procedures. 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 *Further Notice* provided above in paragraph 108. The Commission will send a copy of the *Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[3] In addition, the *Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[4]

A. Need for and Objectives of the Proposed Rules:

2. The Congressional plan set forth in Sections 336 and 337 of the Act and in the 1997 Budget Act is to transition the 700 MHz band from its current use for broadcast services to commercial use and public safety services. One of the spectrum management challenges in expeditiously achieving efficient and intensive commercial use of the 700 MHz band is minimizing the operational difficulties presented by incumbent TV licensees to new wireless services, consistent with maintaining broadcast services through their transition to DTV.[5] These considerations have led us to implement policies in the *First Report and Order* that will facilitate voluntary band-clearing agreements between 700 MHz licensees and TV incumbents.[6] In this rule making proceeding, we seek comment on whether additional mechanisms might further facilitate the voluntary clearing of TV incumbents from the band. These mechanisms include cost-sharing rules, three-way voluntary transition agreements, secondary auctions, and spectrum sharing proposals. Specifically, the *Further Notice* asks whether cost-sharing rules would expedite clearing the 700 MHz band for use by the new licensees and the transition to DTV by incumbent broadcasters, or whether, as the *Further Notice* tentatively concludes, cost-sharing arrangements should be left to negotiations among successful auction bidders. As a general matter, cost-sharing rules would require that, when a 700 MHz licensee reaches a voluntary

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

[2] Public Law No. 106-113, 113 Stat. 1501, Appendix E, Section 213.

[3] *See* 5 U.S.C. § 603(a).

[4] *See id.*

[5] *First Report and Order* at para. 143.

[6] *First Report and Order* at para. 145.

agreement with a TV incumbent to clear its channel, other 700 MHz licensees benefiting from the agreement share in paying at least some portion of the compensation to the incumbent. The *Further Notice* tentatively concludes, however, that under any cost-sharing mechanism the Commission might adopt, that licensees of the 700 MHz public safety spectrum should not be required to pay a share of the clearing costs. Second, the *Further Notice* seeks comment on possible three-way voluntary relocation agreements involving new 700 MHz licensees, incumbent broadcasters in channels 52-58 and 59-69, and broadcasters with operations on lower channels (channels 2-51). Under such agreements, a broadcaster with an allotment on a lower channel would free up one of its channels for relocation by a broadcaster operating in channels 52-58 or 59-69. Third, the *Further Notice* seeks comment on “secondary auctions.” In a secondary auction, which could be run either by a private organization or the Commission, TV incumbents essentially would agree to clear the band in exchange for an amount of compensation that would be determined by the auction. Finally, the *Further Notice* seeks comment on whether broadcasters should be permitted to share spectrum with the new 700 MHz licensees in either time or bits.

B. Legal Basis:

3. This action is authorized under Sections 1, 4(i), 7, 10, 301, 303, 307, 308, 309(j), 309(k), 316, 331, 332, 336, 337 and 614 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 157, 160, 301, 303, 307, 308, 309(j), 309(k), 316, 331, 332, 336, 337, and 534, and the Consolidated Appropriations Act, 2000, Pub. Law 106-113, 113 Stat. 1501, Section 213.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply:

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the proposed rules, if adopted.[7] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[8] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[9] Under the Small Business Act, a "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).[10] According to SBA reporting data, there were approximately 4.44 million small business firms nationwide in 1992.[11]

[7] 5 U.S.C. § 603(b)(3).

[8] 5 U.S.C. § 601(6).

[9] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 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.

[10] 15 U.S.C. § 632.

[11] 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[12] Nationwide, as of 1992, there were approximately 275,801 small organizations.[13] "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."[14] As of 1992, there were approximately 85,006 local governments in the United States.[15] This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.[16] The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities.

5. The policies and rules proposed in the *Further Notice* discussed in this IRFA would affect all small entities that seek to acquire licenses in wireless services in the 698-746 MHz band ("lower 700 MHz band") currently used for television broadcasts on Channels 52-59, or are incumbent television broadcasters.[17] The Commission has not yet developed a definition of small entities applicable to the lower 700 MHz band. Therefore, the applicable definition is the one under the Small Business Administration rules applicable to Communications Services, Not Elsewhere Classified. This definition provides that a small entity is one with $11.0 million or less in annual receipts.[18] However, no channelization plan or licensing plan has been proposed or adopted for the lower 700 MHz band. Therefore, the number of small entities that may apply to acquire licenses in the lower 700 MHz band is unknown.

6. The SBA defines a television broadcasting station that is independently owned and operated, is not dominant in its field of operation, and has no more than $10.5 million in annual receipts as a small business.[19] Television broadcasting stations consist of establishments primarily engaged in broadcasting visual programs by television to the public, except cable and other pay television services.[20] Included in this industry are commercial, religious, educational, and other television stations.[21] Also included are establishments primarily engaged in television

[12] 5 U.S.C. § 601(4).

[13] 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

[14] 5 U.S.C. § 601(5).

[15] U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

[16] *Id.*

[17] *See* text accompanying note 2.

[18] 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4899.

[19] 13 C.F.R. § 121.201, SIC 4833.

[20] Economics and Statistics Administration, Bureau of Census, U.S. Dep't of Commerce, 1992 Census of Transportation, Communications and Utilities, Establishment and Firm Size, Series UC92-S-1, Appendix A-9 (1995).

[21] *Id.*

broadcasting and which produce taped television program materials.[22] There were 1,509 television stations operating in the nation in 1992, of which 1,155 produced less than $10.0 million in revenue (76.5 percent).[23] As of May 31, 1998, official Commission records indicate that 1,579 full power television stations, 2,089 low power television stations, and 4,924 television translator stations were licensed.[24] Using the percentage of television broadcasting licensees that were small entities in 1992 (76.5 percent), we conclude that there are approximately 1,208 full power television stations that are small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements:

7. At this time, the Commission does not anticipate the imposition of new reporting, recordkeeping, or other compliance requirements as a result of this *Further Notice*. If we later determine that we will need to impose new reporting, recordkeeping or other compliance requirements as a result of deciding to adopt any of the proposals described above, *i.e.*, cost-sharing, three-way voluntary transition agreements, secondary auctions, and spectrum sharing, we will seek comment at that time. We seek comment on this tentative conclusion.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered:

8. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) any exemption from coverage of the rule, or any part thereof, for such small entities.

9. We seek comment on the economic impact that the proposals described in the Further Notice might have on small entities. With the exception of the cost-sharing rules, the proposals on which the Further Notice seeks comment are based on the voluntary participation of both new 700 MHz licensees and incumbent television broadcasters. Cost-sharing rules, if adopted, would require those new 700 MHz licensees that benefit from a clearing agreement with a TV incumbent to share the costs of that agreement. Insofar as small entities could not afford to enter into clearing agreements without the costs being shared by other 700 MHz licensees, the cost-sharing rules would provide a positive economic benefit to small entities. To the extent that other licensees would enter into clearing agreements without the costs being shared by small entities, thereby giving the small entities a "free ride," cost-sharing rules would produce a significant economic impact on small entities. Finally, to the extent that small entities would prefer not to enter into clearing agreements but to wait until the incumbent TV licensee was required to clear

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[22] *Id.*

[23] FCC News Release No. 31327, Jan. 13, 1993; Economics and Statistics Administration, Bureau of Census, U.S. Dep't of Commerce, *supra*, Appendix A-9.The amount of $10 million was used to estimate the number of small business establishments because the relevant Census categories stopped at $9,999,999 and began at $10,000,000. No category for $10.5 million existed. Thus, the number is as accurate as it is possible to calculate with the available information.

[24] FCC News Release, June 19, 1998.

the band by statute,[25] and cost-sharing rules would small entities to share costs, such rules would also produce a significant economic impact on small entities. As a general matter, cost-sharing rules must apply to all licensees in order for them to operate as intended. Moreover, without a channelization plan for the lower 700 MHz band, it is not possible at this time to determine whether we could exempt some or all small entities from any cost-sharing rules we might adopt, or otherwise minimize the impact on small entities. One significant alternative we are considering is not to adopt any cost-sharing rules and, indeed, the Further Notice tentatively concludes that cost-sharing arrangements should be left to negotiations between successful auction bidders.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules:

10. None.

SEPARATE STATEMENT OF COMMISSIONER SUSAN NESS

Re: Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168.

I supported our action in January of this year unleashing this prime spectrum for a variety of new wireless services, including fixed and mobile Internet access. Our decision balanced competing needs for spectrum, while protecting new public safety operations in spectrum allocated for that use. I am pleased that we generally uphold the approach we took in our initial order, providing for even greater flexibility.

In this Order, we provide additional certainty for both incumbents and prospective licensees for transitioning this spectrum from its existing broadcast use to new wireless service. We seek to promote -- through reliance on market forces -- an efficient transition to both a new age of services operating in the 746-806 MHz frequencies and a new era of digital television. In particular, our approach to this transition should foster more expeditious delivery of new wireless services, access of public safety organizations to new spectrum, and a more rapid transition to digital transmission for some television stations operating on channels 60 to 69 that might not otherwise be possible.

I believe that this transition is best left to the marketplace, with regulatory intervention only where essential to remove any barriers. I am skeptical that government-mandated agreements between private parties on transition issues will be appropriate or helpful. For this reason, I support the “voluntary” approach we have taken to agreements between licensees, including our decision not to impose mandatory relocation of broadcast operations, as well as our conclusion not to propose the adoption of cost-sharing rules for new licensees seeking to use this spectrum. We should intervene in these processes only if it is essential to eliminate a regulatory barrier, to fulfill our licensing responsibility, or to respond to failures in the marketplace that are manifest and supported by record evidence.

[25] *See* 47 U.S.C. § 309(j)(14).

On this last note, our Order today unavoidably addresses issues related to the overall transition of analog broadcasting to the digital age. While we dabble in some of the crucial aspects of the transition to digital television, we are at the same time, in other contexts, holding back from addressing the critical issues that relate to this transition. This proceeding is certainly not the appropriate venue for formulating a comprehensive approach to digital conversion. I hope that we will soon address holistically the crucial issues surrounding the transition of analog stations to the digital age. If we can successfully address these issues, our actions will lead not only to a robust market for new wireless services and enhanced public safety operation in the 746-806 MHz band, but to a vibrant era of new digital television services for all consumers.

SEPARATE STATEMENT OF COMMISSIONER HAROLD FURCHTGOTT-ROTH, Approving in Part, Dissenting in Part

Re: Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *WT Docket No. 99-168 (rel. June 22, 2000)*

I support efforts to provide additional regulatory certainty to new wireless entrants and existing broadcasters in the 700 MHz spectrum. I am all too aware of the uncertainty that often surrounds license transfers and modifications before this agency. To the extent today's item lends some predictability and transparency to that process, it is a step in the right direction. However, I want to be clear that our efforts should only be aimed at clearing away regulatory barriers to privately negotiated agreements, not at creating new regulatory structures that force one licensee's deals upon unwilling parties. In my view, it may or may not be efficient for new entrants and incumbents to negotiate an early transition to digital. Therefore, it is for the marketplace, not the Commission, to determine when and how these transactions occur.

As set forth above, I believe this item should only focus on removing regulatory barriers to private transactions. However, in many areas, the Commission seems intent on creating a potential host of new rules to intervene in the marketplace. First, the Commission seeks comment on its proposal to run an FCC auction of options to relocate incumbent broadcasters. As a threshold matter, I have serious doubts about our statutory authority to run such an auction.[26] We are not Sotheby's, available for hire to auction any communications-related items. Indeed, even with statutory authority, the rationale for FCC intervention is unclear in light of private parties' plans to conduct such auctions. The notion of government usurping a function currently performed by private parties should be an anathema to the Commission. Second, the notice also discusses cost sharing policies for new entrants seeking to benefit from the early clearing of spectrum. Once again, nothing in our rules forms a barrier to these agreements, therefore I see no basis for the Commission even to contemplate cost sharing here. In addition, such a mandatory cost sharing approach seems particularly unnecessary where there is a discrete number of parties involved in the underlying transactions. Unless and until there is reliable evidence of a market failure or some regulatory gaming, I believe the FCC should allow the market to function unfettered by regulatory intrusions.[27]

Ironically, at a time when the majority is seeking comment on the above new regulatory initiatives, the Commission continues to leave unresolved significant regulatory issues regarding signal degradation, the digital television transition, and the scope of must carry obligations.[28] Rather than the incremental tinkering adopted for the purposes of this Order, I believe we have a duty to develop a comprehensive resolution of these important matters as soon as possible.

[26] See *Service Rules For The 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules,* WT Docket No. 99-168, at ¶108; see also 47 U.S.C. § 309.

[27] In this regard, like my colleagues Commissioners Ness and Tristani, I strongly oppose any mandatory relocation of incumbent broadcasters.

[28] See e.g. Pending *Digital Must Carry* Rulemaking, CS Docket No. 98-120.

Delay, coupled with incremental declarations aimed at advancing other policy goals, is no way to address the core legal issues inherent in the digital television transition.

Finally, I wish to emphasize that nothing in this Order should form the basis for a delay in the 700 MHz auction. As I have previously made clear, the Commission has no authority to exceed the statutory September 30,2000 deadline set by Congress.[29] Unresolved issues in this proceeding cannot and should not form a pretext to further delay this auction under any circumstances.

For the foregoing reasons, I respectfully dissent in part.

[29] See *Separate Statement of Commissioner Harold Furchtgott-Roth in* Auction of Licenses for the 747-762 And 777-792 MHz Bands Postponed Until September 6, 2000 – Report No. AUC-00-31-F (Auction No. 31) and Auction Of Licenses For The MHz Guard Bands Postponed Until September 6, 2000 – Report No. AUC-00-33-D (Auction No. 33) (Released May 2, 2000).

SEPARATE STATEMENT OF COMMISSIONER GLORIA TRISTANI
Dissenting in Part

Re: Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions of Part 27 of the Commission's Rules, WT Docket No. 99-168

I respectfully dissent from the decision to adopt a strong presumption in favor of granting requests to clear existing broadcasters from the 700 MHz band. In its eagerness to make way for new wireless services in this band, the majority dismisses this agency's long-held commitment to the Ameri can public's continued access to free, over-the-air broadcast services. I would have preferred to reaffirm our policy to review such requests on a case-by-case basis.

As I have noted in the past, the 700 MHz spectrum offers unlimited potential for exciting, next generation mobile services and fixed high-speed Internet access that can be deployed ubiquitously.[1] Moreover, this band offers vital new spectrum dedicated to public safety needs. At the same time, however, I am firmly committed to the fundamental policy of continued access to free, over-the-air broadcast services. Today, about 30 percent of all Americans continue to obtain television programming via free, over-the-air broadcast services. These services provide intrinsic value by ensuring that all members of the community have access to a multiplicity of broadcast outlets.

Recognizing these two interests, I supported the decision in the *First Report and Order* to review on a case-by-case basis voluntary requests that would clear incumbent broadcasters from the 700 MHz band and allow new wireless licensees to deploy service.[2] In reviewing loss of broadcast service cases, the Commission has long held that "once in operation, a station assumes an obligation to maintain service to its viewing audience, and the withdrawal or downgrading of existing service is justifiable only if offsetting factors are shown which establish that the public generally will be benefited."[3] The D.C. Circuit has sustained this policy on review, finding that losses in broadcast service are *prima facie* inconsistent with the public interest, and that the grant of requests resulting in such losses must be supported by a strong showing of countervailing

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1 *See* Separate Statement of Commissioner Gloria Tristani, *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, Second Report and Order, FCC 00-90 (rel. Mar. 9, 2000).

2 *See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, First Report and Order, 15 FCC Rcd 476, 534 at para. 145 (2000).

3 *Triangle Publications, Inc.*, 37 FCC 307, 313 (1964), *citing Hall v. FCC*, 237 F.2d 567 (D.C. Cir. 1954).

factors.[4] In the *First Report and Order*, we committed to examine the recover y of spectrum for new wireless uses in light of the loss of broadcast service to the community.

Today's Order, however, stands Commission policy and judicial precedent on its head. The majority concludes that, where private parties agree, deployment of new wireless services should supplant free, over-the-air broadcast service in most – if not all – instances. The majority adopts a presumption that, absent limited circumstances, favors the grant of requests to turn off existing analog stations. This broad-based approach does not adequately consider the impact of the loss of service on the incumbent licensee's broadcast community.

To justify this reversal, the majority asserts that this approach furthers the statutory scheme, facilitates the DTV transition, and results in only limited and temporary loss of service. I am not persuaded.

The Statutory Scheme. While the DTV provisions do not prohibit our review of voluntary agreements to clear a broadcaster's analog spectrum, I do not believe that Congress endorsed a legislative purpose of "expeditiously recovering this spectrum,"[5] as the majority contends. Nor do I believe that Congress envisioned a Commission policy to facilitate early recovery of the broadcasters' spectrum and the resulting loss in free, over-the-air service on channels 59-69.

In fact, Congress did not speak at all about early recovery of this spectrum. To the contrary, it provided that licensees may make a showing to continue their analog broadcasting well beyond December 31, 2006.[6] In the accompanying Conference Report, Congress noted it did so "to ensure that a significant number of consumers in any given market are not left behind without broadcast television service as of January 1, 2007."[7] Moreover, although Congress directed the assignment of the 700 MHz band prior to the return of the spectrum and then further accelerated our auction process, there is no basis to conclude that these actions reflected a desire for the Commission to recover the spectrum quickly.[8]

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4 *See West Michigan Telecasters, Inc. v. FCC*, 460 F.2d 883 (D.C. Cir. 1972).

5 *Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules*, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, WT Docket No. 99-168 (*700 MHz MO&O*) at para. 53; *see also id.* at para. 55 (". . . several statutory purposes involved here are best furthered by enabling voluntary agreements that result in the expeditious and efficient recovery of these frequencies for the legislatively specified commercial and public safety purposes.").

6 47 U.S.C. § 309(j)(14)(B).

7 H.R. Conf. Rep. No. 105-2015 (1997).

8 *See, e.g,,* Letter from Pete V. Domenici, Chairman, Committee on the Budget, U.S. Senate, to William E. Kennard, Chairman, FCC (dated May 5, 2000) ("The purpose of this acceleration was to provide an 'offset' so that fiscal year 2000 appropriations would not exceed the spending

DTV Transition. Although the majority suggests that these voluntary agreements will facilitate the DTV transition, the Order does not require a licensee to have its digital signal in operation in exchange for turning off its analog channel. It merely "expects" that broadcasters will use the revenue derived from voluntary agreements to construct and operate digital television stations.[9] As a result, a licensee may return its analog channel and not broadcast *at all* until its digital construction requirements are triggered in May 2002.[10] Alternatively, a broadcaster may strike a deal to turn in its analog channel in exchange for DTV station costs as the majority suggests, but then decide to go dark.

Temporary Loss of Service. The Order makes the broad finding that "some temporary loss of over-the-air service" is permissible to provide broadcasters with the resources to transition to DTV operations and to enable new wireless services.[11] The majority, however, does not define "temporary," and I fear that today's viewers will lose access to this programming for a very long time. The loss of a licensee's analog service, moreover, is not temporary. For today's viewers, it is the only free, over-the-air broadcast service they access and its loss is a permanent one.

I am also concerned that the majority appears content to defer to private parties those judgments that should fall under our spectrum management obligations. The majority notes that "we will be inclined to grant regulatory requests arising from such private commercial arrangements, provided the requests do not, on balance, have adverse public policy consequences."[12] The Order relies on the views of incumbent broadcasters "with a direct interest in strengthening their transition to DTV," dismissing the impact on viewers today – and for years to come – as "limited and temporary losses in service." *13* Given our long-held precedent regarding the value to the public of free, over-the-air broadcast services, I believe that we should more seriously consider the loss of service to today's viewers.

As a result, I cannot support the majority's decision to alter the analysis of broadcaster requests to turn in their analog spectrum that we established in the *700 MHz First Report and Order*.

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limits established in the law. . . . My motivation was purely budgetary.").

9 *See, e.g., 700 MHz MO&O* at para. 50 ("We expect that incumbents will enter into such agreements only when they determine that the long term viability of their service will be improved thereby.").

10 *See Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, Fifth Report and Order, 12 FCC Rcd 12809, 12841 at para. 76 (1997) (requiring those commercial broadcasters that have not yet constructed DTV facilities to do so by May 1, 2002).

11 *700 MHz MO&O* at para. 60.

12 *Id.* at para. 58.

13 *Id.* at para. 56.

In addition, I have serious misgivings regarding the *Further Notice*. The three-way relocation and secondary auction band clearing proposals raise further issues about how the newly adopted presumption policy would apply in a multi-relocation context.[14] Further, I strongly oppose any possibility of mandatory relocation of an incumbent broadcaster.[15]

Finally, in this age of ever-growing demand for spectrum, I fear that the majority's decision signals a diminishing regard for the public value of free, over-the-air broadcast services. While I fully support the promise of new wireless services, I would have preferred to review requests on a case-by-case basis. I have little doubt that the majority's presumption and the proposals in the *Further Notice* will lead to clearing channels 52-58 next. As we look to the future, my deepest concern is that today's action augurs a fundamental shift away from our commitment to the value that broadcasting serves for all Americans.

14 *See id.* at paras. 90-91.

15 *See id.* at para. 92 (seeking comment on industry proposals).