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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of)
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Amendment of Parts 21 and 74 of the)
Commission's Rules With Regard to)
Filing Procedures in the Multipoint)
Distribution Service and in the)
Instructional Television Fixed Service)
)
and)
)
Implementation of Section 309(j) of the)
Communications Act - Competitive Bidding)

MM Docket No. 94-131

PP Docket No. 93-253

MEMORANDUM AND ORDER ON RECONSIDERATION

Adopted: October 27, 1995 Released: October 27, 1995

By the Commission:

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I. INTRODUCTION AND BACKGROUND

1. The Commission has before it petitions for reconsideration of the *Report and Order on Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding*, in MM Docket No. 94-131 and PP Docket No. 93-253, 10 FCC Rcd 9569 (1995) ("*MDS Report and Order*"), released June 30, 1995, which modified the Multipoint Distribution Service ("MDS") application process and established competitive bidding procedures to select among mutually exclusive applicants for MDS.¹

2. Under the competitive bidding procedures established in the *MDS Report and Order*, a geographic licensing plan was developed under which the Commission would allot one MDS authorization for each of the 487 Basic Trading Areas ("BTAs") and six additional BTA-like geographic areas.² The BTA authorization holder would be able to construct and license facilities to provide wireless cable service on any usable MDS channels within the BTA, and would have preferred rights to the available Instructional

¹ In another order, adopted the same day as the *MDS Report and Order*, the Commission amended 47 C.F.R. § 21.902, to expand the protected service area for authorized or previously proposed MDS facilities. *Second Order on Reconsideration* in Gen. Docket Nos. 90-54 and 80-113, 10 FCC Rcd 7074 (1995) ("*Second Order on Reconsideration*"), *petition for recon. pending*.

² Rand McNally defined 487 BTAs in the *1992 Commercial Atlas & Marketing Guide*. Since Rand McNally did not include all areas, we added them to the list of areas to be auctioned as BTA-like geographic areas, bringing the total to 493 authorizations to be auctioned. See *MDS Report and Order* at ¶ 37.

Television Fixed Service ("ITFS") frequencies and lease agreements within the BTA.³ The *MDS Report and Order* required the BTA authorization holder to protect currently authorized and previously proposed MDS stations, known as "incumbents," as well as the protected service areas and receive sites of ITFS systems, against harmful interference. In order to provide for efficient licensing of new stations while ensuring interference protection for authorized or previously proposed facilities, an initial license would be granted for the BTA service area, known as the "BTA authorization," while separate conditional station licenses would be awarded for each single channel or channel group at each site location. In the *Report and Order*, we also provided certain measures for small businesses participating in the auction, imposed a five year build-out requirement on the BTA authorization holder, and established procedures to allow partitioning of the BTA.

3. Thirteen petitions for reconsideration on various aspects of the *MDS Report and Order* have been filed with the Commission. Oppositions and replies have also been received. Petitioners include the Wireless Cable Association International, Inc. ("the Association"),⁴ individual MDS and ITFS licensees, educational institutions and other entities who are interested in MDS.⁵ We will resolve the issues presented in these petitions for reconsideration and related filings in this single order as part of our ongoing effort to facilitate development of MDS.⁶

4. Petitioners generally praise the Commission's efforts to facilitate the development of wireless cable services.⁷ However, petitioners ask for reconsideration or clarification of certain Commission rules and policies adopted in the *MDS Report and*

³ ITFS channels are assigned to educational organizations and used primarily for the transmission of instructional, cultural, and other types of educational material to one or more fixed receiving locations. Wireless cable system operators often lease excess capacity from the ITFS licensees within the same service area.

⁴ The Association includes the operators of virtually all wireless cable systems in the United States, as well as MDS and ITFS licensees, equipment manufacturers and program suppliers.

⁵ A list of parties filing petitions for reconsideration, oppositions and replies is provided in Appendix A.

⁶ Unless otherwise indicated, "MDS" includes single channel Multipoint Distribution Service and Multichannel Multipoint Distribution Service applications and authorizations.

⁷ Wireless cable programming resembles cable television programming but uses microwave channels instead of coaxial cable to deliver programming to subscribers. Our use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

Order. We will grant certain aspects of the petitions for reconsideration, most notably those requesting removal of the BTA authorization holder's right of first refusal regarding new ITFS lease agreements. We also will deny other issues presented in the petitions, and clarify several technical and engineering issues. In addition, we have raised one issue, regarding unjust enrichment to prevent abuse of the partitioning rules, on our own motion. We discuss each of the subjects raised by the petitions for reconsideration separately.

II. DISCUSSION

A. Filing Procedures and Service Rules

1. Clarification of Rights of BTA Authorization Holder and Term of BTA

5. *Background.* The *MDS Report and Order*, and newly adopted Section 21.930(a)(1) of the rules, 47 C.F.R. § 21.930(a)(1), gives the BTA authorization holder a five year build-out period during which the BTA authorization holder will develop and expand MDS stations and operations in the protected service area.

6. *Pleadings.* The Association's petition for reconsideration requests clarification of the rights of the BTA authorization holder. Petition of the Association at 11-17. Specifically, the Association asks that the Commission clarify whether the BTA authorization holder will be permitted to add new stations within its protected service area after the five year build-out period. *Id.* at 13. The Association also asks for clarification of the term of the BTA authorization, suggesting that the BTA authorization be given a ten-year term with a renewal expectancy similar to that given in Personal Communications Services ("PCS"). *Id.* at 14. NYNEX Corporation ("NYNEX") supports the Association's requests for clarification of the term and renewal expectancy of the BTA authorization. NYNEX Comments at 2-3.

7. *Resolution.* A BTA authorization holder may add new stations within its protected service area after the five year build-out period, subject to the filing and approval of additional long-form applications for each channel or channel group to be authorized at each site so long as it has met the initial build-out obligations as set forth in § 21.930(c). *See MDS Report and Order* at ¶ 39. We are also establishing a ten-year term for the BTA authorization because we agree with petitioners that a ten-year term offers consistency with the ten-year term of the individual station licenses as well as a stable environment which promotes investment. *See* Petition of the Association at 14-15.

8. As to renewal expectancy, we note that in other services allocated through competitive bidding, the Commission has attempted to be consistent with the renewal expectancy which existed in the service prior to auction. Therefore, consistent with the established procedure within this service, MDS licensees and BTA authorization holders will receive a renewal expectation by demonstrating substantial service during the license

term and compliance with applicable Commission rules, policies and the Communications Act.

2. **Blanket Licensing**

9. ***Background.*** Under the licensing plan adopted by the Commission in the *MDS Report and Order*, the auction winner may file one or more long-form applications to construct facilities anywhere inside their BTA on usable MDS channels, provided their engineering design meets the interference protection standards to all authorized or previously proposed MDS and ITFS facilities, and complies with signal strength limits at their BTA boundaries. Under 47 C.F.R. § 21.925(b), a separate long-form application would be filed for each MDS single channel or channel group station license sought within the BTA. Pursuant to Section 309(b) of the Communications Act, 47 U.S.C. § 309(b), as implemented by 47 C.F.R. §§ 21.30 and 21.925(d), long-form applications accepted for filing would be proposed for grant by a public notice, announcing that the applications are accepted for filing and opening a thirty-day period for filing petitions to deny. If there are no petitions to deny filed, or upon resolution of petitions that had been filed, and if the applicant is otherwise qualified, the Commission would grant the conditional station license. An initial license would be granted for the BTA service area, called a "BTA authorization," and separate conditional station licenses would be awarded for each single channel or channel group at each site location, called a "station license for each individual station within the BTA."

10. ***Pleadings.*** Bell Atlantic Corporation ("Bell Atlantic") advocates adoption of a blanket BTA license system in which BTA authorization holders would be allowed to establish facilities anywhere within the boundaries of their BTA without prior Commission approval for each transmitter site as long as construction of their facilities do not cause interference to incumbent licensees or adjacent BTAs. To implement this, Bell Atlantic suggests that the Commission require each BTA authorization holder to file an initial long-form application which identifies the protected service areas of existing MDS stations, ITFS receive sites and the boundaries of adjacent BTAs. Once this initial long-form application has been placed on public notice for comment and approved by the Commission, the BTA authorization holder would receive the blanket authorization. Under Bell Atlantic's blanket licensing plan, the BTA authorization holder would be required to file a post-installation certification, providing other MDS and ITFS licensees a certain time period within which to claim interference, and would be required to serve such certifications on all cochannel and adjacent-channel ITFS and MDS licensees located within 50 miles of the transmitter site. Bell Atlantic argues that adoption of such a policy would eliminate the costly and time-consuming application process, which provides an opportunity for neighboring stations to file petitions to deny, and would give BTA authorization holders more flexibility to configure their systems to meet subscribers' needs. Petition of Bell Atlantic at 3-10.

11. Pacific Telesis Enterprise Group and Cross Country Wireless Inc. ("PacTel")

filed a joint petition for reconsideration in which they support a blanket licensing plan as described by Bell Atlantic with one addition. PacTel recommends that the Commission treat incumbent ITFS licensees and MDS licensees similarly by permitting ITFS licensees to modify their facilities post-BTA auction only if the modification does not exceed an established limiting power flux density at the boundary of their service areas. In the alternative, PacTel recommends an approach in which the BTA authorization holder would be given a period of two years to file applications for wireless cable facilities within its BTA. Under PacTel's approach, during this two-year period, ITFS and MDS modifications would be permitted only if they comply with an established limiting power flux density requirement. At the end of this two-year period, PacTel's proposal would allow ITFS new applications and ITFS or MDS modifications if they afforded interference protection to the 35-mile protected service area of the BTA authorization holder's existing or previously proposed facilities. Opposition of PacTel at 5-7.

12. **Resolution.** We are not persuaded to use either the Bell Atlantic or PacTel approach to licensing MDS. In adopting the new licensing plan, we were very cognizant of the fact that MDS is a heavily encumbered service. One of the most important goals of the *MDS Report and Order* was to protect the existing MDS and ITFS service patterns, the investment of incumbent operators and the service already being provided to subscribers. With this in mind, we believe that a blanket licensing approach, in which the BTA authorization would be permitted to establish facilities anywhere within the boundaries of the BTA without prior Commission approval, is inappropriate for MDS for several reasons. First, a blanket licensing approach would eliminate the opportunity for ITFS and MDS entities to file petitions to deny an application for an individual MDS station design filed after the initial long-form stage. Under 47 C.F.R. § 21.902, an applicant must conduct interference analyses and serve these upon ITFS and MDS incumbents required to be studied. Second, under blanket licensing, the Commission staff would no longer perform its application acceptance studies, which quite often identify proposals which are predicted to interfere with incumbents. Without such studies as a filter, we would expect more interference complaints to be subsequently filed. Third, since not all thirteen MDS channels are available at each location, BTA authorizations will most likely include different channels at different locations within a BTA. The licensing of a single BTA may be very complicated and where a modification is made, the licensee would be required to provide a complete recitation of all of the different stations and locations. In addition, it would be necessary for the Commission to reissue the system license following each modification. We also note that the blanket licensing scheme as proposed by Bell Atlantic and PacTel is of limited usefulness in this service since the overwhelming majority of MDS facilities would still need prior approval. These include: (1) facilities that require notification to the FAA, (2) facilities that may have a significant environmental effect, and (3) facilities that require coordination because of their proximity to the United States borders.

13. Furthermore, the Commission has recognized that wireless cable operators

must aggregate as many channels as possible from the available thirteen MDS and excess capacity on the twenty ITFS channels in order to be competitive with wired cable. Since blanket licensing would not be applicable to ITFS, and is beyond the scope of this proceeding, the advantages of blanket licensing would be realized for only thirteen of the maximum thirty-three channels in a wireless cable operation. PacTel's alternative two-year licensing approach is unnecessary as a means of ensuring a stable station environment in which to facilitate the planning and implementation of BTA stations. An application filing window for the ITFS service was held between October 16 - October 20, 1995. We do not contemplate opening another filing window in the near future. This should assure potential BTA holders a sufficient opportunity to implement their construction plans and to negotiate cooperative arrangements with ITFS licensees. In this regard, we note the historical cooperation between the MDS and ITFS services.

3. BTA Authorization Holders Right of First Refusal Regarding New ITFS Excess Capacity Leases

14. **Background.** There are a maximum of thirty-three microwave channels used for wireless cable in each market, which includes the excess capacity on up to twenty ITFS channels. To accumulate a full complement of channels, MDS operators often lease excess channel capacity from ITFS licensees. As the Commission recently recognized, the growth of MDS has led to the continued development of ITFS by supporting and funding approximately ninety-five percent of all new ITFS applicants. *MDS Report and Order* at ¶ 8. Currently, ITFS licensees have the right to negotiate with any wireless cable operators wishing to lease their excess channel capacity. Under the provisions set forth in the *MDS Report and Order*, ITFS licensees that choose to lease excess channel capacity would continue to be free to negotiate with any potential lessee, including the holder of the BTA. *MDS Report and Order* at ¶ 41. The BTA authorization holder would, however, be afforded the right to match the final offer of any proposed lessee. *Id.* Should the holder of the BTA authorization decline to exercise such right, then the ITFS licensee may enter into a lease arrangement with any MDS operator it so chooses. This right of first refusal would not interfere with contractual rights in effect at the time the BTA authorization was issued or with the renewal of such rights.

15. **Pleadings.** The provision for the right of first refusal was the subject of the largest number of petitions,⁸ and those who addressed this issue oppose this provision.

⁸ Petitions for reconsideration of the right of first refusal were filed by: A/B Financial, Inc., *et al.* and Betty Brown, *et al.* ("A/B Financial"); the Association; Hispanic Information and Telecommunications Network, Inc.; Instructional Telecommunications Foundation, Inc. ("Instructional Telecommunications"); ITFS Parties; Network for Instructional TV, Inc.; the National ITFS Association; PacTel; Schwartz, Woods and Miller, on behalf of its ITFS clients; Trans Video Communications, Inc. ("Trans Video"); and United States Wireless

Instructional Telecommunications argues that the provision of a right of first refusal allows the BTA authorization holder to match the terms of the negotiated lease but ignores non-monetary concerns of ITFS licensees, such as the technical and operational support received from lessees. Petition of Instructional Telecommunications at 6-9. Instructional Telecommunications states that it conducts a significant amount of research before entering into an excess capacity lease to ensure that the lessee firm is, among other things, stable, technically competent, adequately funded and staffed, aware of FCC rule compliance, and supportive of education. *Id.* at 2-3. A number of petitioners point out that the ITFS licensee's evaluation of the financial stability or managerial soundness of a potential lessee is especially important given the number of speculators who have been involved in the wireless cable industry. *Id.*; Petition of ITFS Parties at 4-5; Petition of Network for Instructional TV at 5. Other petitioners argue that provision for a right of first refusal devalues the compensation which could be received for ITFS leases because fewer parties will negotiate for them knowing that any agreement they may reach could be preempted by the exercise of the BTA authorization holder's right of first refusal. Petition of Schwartz, Woods and Miller at 8-9; Petition of Network for Instructional TV at 4-5.

16. **Resolution.** We are convinced by petitioners' arguments to reconsider granting the BTA authorization holder a right of first refusal. ITFS licensees continue to have the right to negotiate ITFS excess capacity leases with all eligible parties.⁹ By including the right of first refusal we intended to encourage the BTA authorization holder's accumulation of the full complement of channels necessary for a viable MDS system by granting the BTA authorization holder access to any ITFS channels available for lease. Given the importance of leased ITFS channels to MDS operators, we believed that providing this right of first refusal would help integrate ITFS and MDS more effectively. However, the comments filed by petitioners raise legitimate concerns. We are especially cognizant of the needs of educational institutions to enter into contracts with parties whom they feel are financially secure and able to provide technical support because we recognize that ITFS excess capacity leases often provide for technical

Cable, Inc. ("U.S. Wireless"). The ITFS Parties are a group of entities involved in the ITFS service, a complete list of which appears at Appendix A. The ITFS clients of Schwartz, Woods and Miller also appear at Appendix A.

⁹ Several petitioners argue that the right of first refusal should be eliminated because it restricts the ITFS licensees freedom of contract. *See, e.g.*, Petition of Schwartz, Woods and Miller at 5-8; Petition of Trans Video at 3-5. Numerous petitioners also contend that the right of first refusal was promulgated without appropriate notice and comment as required by the Administrative Procedures Act, 5 U.S.C. § 553(b)(3). *See, e.g.*, Petition of Network for Instructional TV at 3-4; Petition of the Association at 3-6. Since the policy concerns presented by petitioners have persuaded us to grant their request and remove the right of first refusal for BTA authorization holders, we need not reach these issues.

support by the lessee. Thus, while the right of first refusal could have enhanced the BTA authorization holder's ability to accumulate channels, we have been persuaded that the burden imposed on ITFS licensees by our approach may be excessive. We believe that legitimate, technically proficient BTA authorization holders will be able to negotiate for lease of excess ITFS capacity even under this market-based approach.

4. Alternative Uses of MDS Frequencies.

17. *Background.* In the *MDS Report and Order* we stated that the principal use of MDS frequencies is provision of wireless cable service. *MDS Report and Order* at ¶ 59. We pointed out that the present regulations allow for the use of MDS frequencies for "any kind of communications service." *Id.* (quoting 47 C.F.R. § 21.903(b)). And we noted that applicants may need to seek waiver of MDS technical rules precluding alternative uses. *Id.* (citing 47 C.F.R. §§ 21.903(a), 21.906).

18. *Pleadings.* The National ITFS Association filed a petition for reconsideration on the issue of alternative use of MDS frequencies. It argues that the inclusion of language in the *MDS Report and Order* suggesting that the spectrum may be used for services other than wireless cable video transmission will encourage speculative bidders to enter the MDS auction in the hopes of using MDS frequencies for PCS or other services. Petition of National ITFS Association at 3-4. Several parties ask that the Commission clarify the rules pertaining to the use of digital transmission technology on MDS spectrum. *See, e.g.,* Petition of U.S. Wireless at 1-2. SR Telecom filed a "Response to Petition for Reconsideration" to U.S. Wireless' petition, asking that the Commission permit the provision of wireless loop services over the MDS spectrum. Since SR Telecom's Response includes comments on alternative use of the spectrum, and not solely on digital transmission, we have considered them in our discussion above. SR Telecom asks that the Commission clarify that wireless loop technology, which provides wireless, fixed telephone subscriber service, as well as supervisory control and data acquisition transport for industrial uses, be permitted on MDS frequencies. Response of SR Telecom at 2. Specifically, SR Telecom asks that the Commission eliminate the requirement, codified at 47 C.F.R. § 21.907, that an MDS licensee be able to provide television service. *Id.* at 7-8. SR Telecom also asks that other technical rules be eliminated or qualified to allow for wireless loop technology: Section 21.903(a), requiring one-way radio transmission; Section 21.903(b), requiring that the common carrier control the operation of the receiving facilities; and, Section 21.906, restricting the use of transmitting and receiving antennas. The Association opposes SR Telecom's Response, stating that the record in this proceeding is inadequate to permit consideration of the use of the MDS spectrum for non-video offerings. Reply of the Association at 2. The Association states that when the Commission has allowed new technologies to be employed on the MDS frequencies, it has done so in a manner that ensures that no harmful electrical interference will be caused to MDS and ITFS licensees. *Id.* at 4. Finally, the Association suggests that SR Telecom file a petition on the use of wireless loop technology, including detailed interference standards, and that the Commission

invite comments to SR Telecom's proposal. *Id.*

19. **Resolution.** One of the stated goals of the *MDS Report and Order* and its associated *Notice of Proposed Rulemaking* was to establish video programming on the MDS spectrum as a competitive choice to cable services.¹⁰ As was stated in the *Notice*, "[a]lthough competing technologies have made major strides since the previous report on cable competition in 1990, the cable television market remains largely noncompetitive This rulemaking is one of several administrative improvements directed toward enhancing the development of wireless cable operators as viable competitors in the video programming marketplace." *Notice* at 7666-7667 (citations and footnotes omitted). However, previous MDS rulemakings have also noted that operators should be afforded the flexibility to provide other services. *See, e.g., In the Matter of Revisions to Part 21 of the Commissions Rules*, 2 FCC Rcd 4251, 4255 (1987) ("We believe a similar flexible approach is particularly appropriate to MDS In the non-entertainment market, MDS may compete with short-haul microwave, coaxial cable, Digital Termination Systems, fiber optic cable and fixed satellites."); *see also, Report and Order in the Matter of Parts 1, 2, 21, and 43 of the Commissions Rules*, 45 FCC Rcd 616, 619 n.6 (1974) ("MDS is not limited to television transmission and should be capable of many diverse forms of transmission such as the omnidirectional distribution of high speed computer data, audio, control signal, facsimile, etc.").

20. In the *MDS Report and Order* we changed none of our rules regarding the use of MDS frequencies, and we do not do so here. We will allow alternative uses other than wireless cable video transmission if the applicant can satisfy MDS technical rules or adequately support waivers of those rules. We will examine waiver requests for these uses on a case by case basis. However, we will not grant waivers of technical rules where we find that applicants merely are attempting to warehouse these frequencies. We emphasize that any party entering the MDS auction should do so with the expectation that all station license applications must protect against harmful electrical interference to incumbent MDS operations as well as ITFS receive sites and the service areas associated with channel leases. The Commission has received a joint petition for declaratory ruling filed by a group of ninety-nine entities involved in the wireless cable industry, asking for clarification of the use of digital transmission by MDS and ITFS stations, and has placed the request for declaratory ruling on public notice, asking for comments. *Public Notice, Pleading Cycle Established for Comments on Request for Declaratory Ruling on the Use of Digital Modulation by MDS and ITFS Stations*, Report No. MM 95-83, DA 95-1854 (released August 23, 1995). Therefore, we find that clarification of the use of digital transmission technology on MDS frequencies beyond the scope of this proceeding.

¹⁰ *See, e.g., MDS Report and Order; Notice of Proposed Rulemaking* in MM Docket No. 94-131 and PP Docket No. 93-253, 9 FCC Rcd 7665 (1994) ("*Notice*") at ¶ 1, 6, 8.

5. Cable/MDS Cross Ownership

21. **Background.** Newly promulgated Section 21.923 of the rules allows any entity to receive a BTA authorization, other than those precluded by Sections 21.4 or 21.912. Section 21.912, originally adopted in 1990, generally bars a cable system operator from either holding a license for or leasing an MDS station that has a protected service area overlapping its cable franchise area.

22. **Pleadings.** The Association filed a petition on this issue, arguing that any entity currently operating a cable franchise and MDS facility pursuant to an exemption or waiver of the cross ownership prohibitions should be able to qualify as a BTA authorization holder for that area. Petition of the Association at 33-37. The Association contends that this will allow entities currently operating MDS facilities and cable systems pursuant to a waiver or exemption to accumulate channels. *Id.*

23. **Resolution.** We will evaluate waivers of the cable/MDS cross ownership restrictions on a case by case basis for each channel or channel group application filed by BTA authorization holders. The Commission has granted exemptions and waivers of the cable/MDS restrictions in a variety of circumstances. A blanket exemption was established for cable/MDS operations or agreements established prior to February 8, 1990, the date a *Notice of Proposed Rulemaking* was adopted on cable/MDS cross ownership.¹¹ In implementing the 1992 Cable Act, the Commission grandfathered other exceptions existing prior to the October 5, 1992, enactment of the Act.¹² The Cable Act also provided for the grant of waivers to the extent that it is necessary to ensure that all significant portions of a franchise area are able to obtain video programming.¹³ The Commission has also granted certain written waivers pursuant to 47 C.F.R. § 21.19, where the applicants were able to demonstrate that the underlying purpose of the cable/MDS cross ownership prohibitions would not be frustrated by the grant of a waiver. Additionally, the Commission granted a temporary blanket waiver for prohibited cable/MDS overlaps which were the result of the expansion of the protected service area and provided that any party receiving a temporary waiver may file a request for special relief, under procedures specified at 47 C.F.R. § 76.7, asking that their temporary waiver be extended. *Second Order on Reconsideration* at ¶ 31. We do not have enough information at this time to assess whether the Congressional directives

¹¹ See *Second Report and Order* in Gen. Docket No. 90-54, 6 FCC Rcd 6792, 6800 (1991), *recon. denied*, 7 FCC 5648 (1992).

¹² Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 613(a)(2)(A), 106 Stat. 1460 (amending the Communications Act of 1934), codified at 47 U.S.C. § 533(a)(2)(A).

¹³ 47 U.S.C. § 533(a)(2)(B).

provided in the Cable Act would be frustrated by the extension of these waivers. By allowing Commission staff to individually evaluate the waiver requests for each channel or channel group application within the BTA, we will provide an opportunity to evaluate whether these waiver requests comply with the Cable Act and our regulations. We reiterate that parties receiving a temporary waiver for prohibited overlaps caused by the expansion of the protected service area due to the adoption of the *Second Order on Reconsideration* must file waivers on or before June 1, 1996. *Second Order on Reconsideration* at ¶ 31.

B. Engineering and Technical Issues

6. Clarification of Interference Protection to MDS Incumbents and ITFS Operators

24. **Background.** Paragraph 57 of the *MDS Report and Order* establishes the interference obligations of incumbent MDS stations with respect to the BTA authorization holder, defining a limiting power flux density of -73 dBW/m², which may not be exceeded at points along the protected service area, except in grandfathered situations. Newly adopted Section 21.938 mandates that the stations of BTA authorization holders must not interfere within the protected areas of ITFS and incumbent MDS licensees and with registered ITFS receive sites. It further provides that "[t]he calculated free space power flux density from a station may not exceed -73 dBW/m² at locations on BTA or PSA ("partitioned service area") boundaries." Paragraph 69 of the *MDS Report and Order* describes the computer program that will be used by Commission staff to determine if an application is acceptable for filing. The methodology of that program is depicted in new Section 21.902(f)(6), which provides the criteria by which applications will be accepted for filing.

25. **Pleadings.** The Association states that while they believe the *MDS Report and Order* was clear, they have received comments from their membership indicating that further clarification is needed on the interference protection requirements. Petition of the Association at 30-31. The Association indicates that two features of the acceptable for filing methodology need clarification. First, the program that will analyze for interference will only analyze at 360 evenly spaced points along the protected service area boundary, and will not test for potential interference within the protected service area itself. Second, in calculating the desired to undesired signal level for testing against the 45 dB cochannel standard, the computer program will assume a desired signal level of -83 dBW, even though the actual received signal level at a given point may differ. The Association notes that since confusion has resulted, the Commission should state again that any proposed station required to protect a previously authorized or proposed station must protect all points within such station's service area to the 45 dB and 0 dB cochannel and adjacent channel benchmarks using actual desired signal levels. American Telecasting contends that most MDS stations operate with transmitter output powers of 10 or 50 watts, while the assumption of the new rule is that the transmitter is operating with a transmitter output power of 200 watts. Petition

of American Telecasting at 4-6. It asks that the Commission clarify that paragraph (6) of Section 21.902(f) is nothing more than an application acceptance screening test, intended to mirror the capabilities of the computer program the Commission has designed to determine whether an MDS application is acceptable for filing.

26. Several petitioners also ask for clarification of Section 21.938(e). *See, e.g.*, Petition of the Association at 28-30. They argue that a literal reading of this regulation will inadvertently extend interference protection requirements meant to apply only to BTA authorization holders *vis-a-vis* each other to include incumbent MDS stations. They believe that the use of the term "a station" is inaccurate with respect to incumbent stations. They suggest amending Section 21.938(e) by replacing the phrase "a station" with "an MDS station (other than an incumbent MDS station.)"

27. **Resolution.** A goal of this proceeding has been to assure that new MDS service will not cause harmful electromagnetic interference to the authorized and previously proposed services of MDS "incumbents" and ITFS operators. To that end, the *MDS Report and Order* adopted interference protection rights and responsibilities, standards, and application processing criteria and tools. We wish to clarify all of these important matters.

28. Section 21.938 defines the responsibilities of BTA and partitioned service area authorization holders ("BTA holders") to protect MDS incumbents and ITFS receive sites and protected service areas. In the absence of a written interference agreement, a BTA station must not cause harmful interference to MDS or ITFS service that was authorized or proposed in an application filed before the filing of the application for the BTA station. BTA holders must correct any condition of interference anywhere *within* the MDS incumbent's protected 56.33 km (35-mile) circle, involving the incumbent's previously authorized or proposed facilities. Such protection also extends to an incumbent's commercial ITFS channels and other ITFS channels used through leasing agreements. In addition, a BTA holder's station must not interfere with a registered receive site of an earlier authorized or proposed ITFS station. Section 21.938(c) specifically requires BTA holders to correct at their own expense any harmful interference caused to incumbent MDS stations. We intended this remedial provision to apply to all of the categories of interference protection identified in Section 21.938(b). The exclusion of ITFS station operations and proposals was inadvertent and is remedied herein as requested by ITFS Parties and Network for Instructional TV. We also adopt the Association's suggestion to clarify Section 21.938(e) by replacing the phrase "a station" with "an MDS station (other than an incumbent MDS station)."

29. Regarding interference standards and analysis in the application process, we reiterate that this proceeding was not intended as a vehicle to change the standards for protecting incumbent MDS stations against harmful interference. As stated in the *MDS Report and Order*:

Specifically, stations proposed in BTA long-form applications must meet the 45 dB and 0 dB cochannel and adjacent channel desired-to-undesired signal

strength ratios at the boundary of each protected 35-mile circle. *We will also continue to use these stricter protection standards within incumbents' protected service areas . . .*

MDS Report and Order at ¶ 54 (emphasis added).

The MDS interference standards should not be confused with the processing methods, which can only approximate the standard. For example, under the interference standards, incumbents' 35-mile areas are to be protected *not only at points along the boundary, but also within the boundary.*

Id. at ¶ 71 (emphasis added).

30. These interference standards are also clearly stated in the Commission's Rules. Section 21.902(b)(3) requires applicants to "[e]ngineer the system to provide at least 45 dB of cochannel interference protection *within* the 56.33 km (35-mile) protected service area of any authorized or previously proposed station" Section 21.902(c)(1) directs applicants to prepare "analysis of the potential for harmful interference *within* the 56.33 km (35-mile) protected service areas of any authorized or previously proposed incumbent station" and (c)(2) of this section provides that "[a]pplicants may design interference studies in any manner that demonstrates the avoidance of harmful interference, *as defined in this subpart.*" (emphasis added). Unless there is an interference agreement between affected parties, the facilities proposed in long-form applications of BTA holders must be designed to protect in the following manner the service areas of authorized and previously proposed facilities of ITFS and incumbent MDS licensees or applicants: *where a proposed facility has an unobstructed signal path to a point on or within a 56.33 km (35-mile) area, the cochannel and adjacent channel desired-to-undesired (D/U) signal strength ratios must not be less than 45 dB and 0 dB, respectively; the value of the desired signal (D) is determined by the authorized or previously proposed station parameters, as applicable.*

31. The protection standard does not specify a minimum value of desired signal strength; *i.e.*, to protect only those portions of the 56.33 km (35-mile) area where there are wireless cable subscribers or which is otherwise being served. An incumbent may wish to serve a portion of the protected area shielded from the incumbent's transmitter site with a signal booster. Nevertheless, the applicable 45 dB or 0 dB desired-to-undesired signal strength ratios must be satisfied throughout the protected area.

32. As a supplement to the interference standards for protecting incumbents, the *MDS Report and Order* adopted specific application acceptance criteria. See 47 C.F.R. § 21.902(f)(6). For this purpose and this purpose only, the rule states that "harmful interference will be considered to occur at locations [for which there are unobstructed signal paths] along the boundary wherever the ratio between the desired signal level of - 83 dBw and the received power from a proposed cochannel or adjacent channel station is less than 45 dB or 0 dB." This application "screening" test is derived on the basis of line-of-sight

omnidirectional service to the 56.33 km (35-mile) perimeter using the maximum allowable station power. The acceptance test is useful in that it provides a quantifiable measure of interference protection independent of the actual station parameters. As a simple "worst case" criteria for predicting interference, it is easily verified by a computer program. The Commission staff ordinarily will grant uncontested applications that pass this test; *i.e.*, where no objection to the grant of an application has been filed. In effect, this places an increased burden on applicants and licensees, BTA holders and incumbents alike, to safeguard against interference. We are not prescribing the manner in which applicants' interference studies are to be conducted, nor are we generally requiring that these be submitted to the Commission. However, we caution applicants against relying solely on our acceptance test as the basis for an interference analysis. Applicants who prepare inadequate analyses run the risk of inviting a petition to deny their application and related processing delays or, worse yet, subsequent suspension of their station operation while attempting to eliminate an interference conflict.

7. Allowing a Common Service Area for MDS and ITFS Stations in a Wireless Cable System of An Incumbent

33. **Background.** Under MDS regulations in existence prior to the establishment of new rules in the *MDS Report and Order*, when an MDS station relocated its transmission site, its protected service area, if circular, was centered on the relocated transmitter site. Under the newly promulgated rules, the location of the protected service area boundaries became fixed on September 15, 1995. The center reference point became the authorized and/or previously proposed geographic coordinates of the transmitting antenna site as of that date. Any incumbent MDS station relocating after that date will retain the protected service area which is 56.33 km (35-miles) from that fixed point. A limited exception is also provided in ¶ 83, below.

34. **Pleadings.** The Association's petition included comments on this issue. Petition of the Association at 17-20. The Association suggests that an ITFS licensee who chooses to relocate after the September 15, 1995, date for the establishment of fixed reference points for MDS stations should be allowed the opportunity to choose the protected service area of the collocated MDS station as its protected service area. The Association notes that the Commission has historically recognized the importance of allowing all of the wireless cable channels within a single system a common protected service area. The new rules on protected service areas, the Association contends, will cause difficulties when an incumbent MDS station and its leased ITFS station relocate. An operator of a wireless cable system using both MDS and ITFS channels will have to contend with different protected areas for the MDS and ITFS channels in the system, resulting in interference on some channels and unsatisfactory service for consumers. The Association also argues that operators of neighboring systems will be disadvantaged by having to design systems to protect different service areas for different channels. The Association suggests that ITFS licensees that collocate with MDS stations should have the option of having either a protected service area centered at their station location or co-terminus with the collocated MDS station.

35. **Resolution.** We will adopt the suggestion of the Association to allow ITFS licensees and applicants the option to choose the fixed protected service area of a collocated MDS station of an incumbent as its protected service area. We note that historically the protected service area associated with leased ITFS channels has been the protected area of a collocated MDS station. Section 74.903 of our ITFS rules cross references the protected area provision in Section 21.902(d) of our MDS rules. This, of course, reflects the fact that the vast majority of ITFS licensees now lease their excess channel capacity for use in collocated wireless cable systems. The protected service area for incumbents' operations on commercial ITFS channels is defined in the same manner. See 47 C.F.R. § 74.990. Thus, an argument could be made that our rules already provide a common service area for the MDS and ITFS channels in a wireless cable system, regardless of how that area is defined. Notwithstanding this fact, we certainly agree with the Association that significant advantages accrue when all MDS and ITFS channels in a single wireless cable system are equally protected. A common service area facilitates uniformity in service offerings to subscribers in the same general market area, thereby enhancing a wireless cable operators' ability to compete with wired cable systems. It also obviates the need for neighboring systems to design their systems to protect different areas for different sets of channels, thereby reducing system design complexity and related costs and promoting efficient spectrum use by encouraging collocated operations.

36. We will amend Section 74.903 of our rules to allow ITFS licensees and applicants who lease excess channel capacity for a wireless cable system the option to specify in their applications either a 56.33 km (35-mile) area centered on their transmitting antenna site or, if different, the permanent protected service area of a collocated MDS station. We are amending Section 74.903 of our rules to allow ITFS licensees to specify an area different than that of the collocated wireless cable system; *i.e.*, an area centered on an ITFS licensee's noncollocated transmitting antenna site. We will modify our ITFS data base and develop a supplement to the ITFS application form to accommodate this action. Until the supplement to the form is available, ITFS licensees and applicants may indicate their service area preference in an exhibit to an application or amendment to a pending application.¹⁴ For an ITFS entity that has elected the fixed MDS service area, subsequent relocation of the transmitting antenna site will not change the protected service area. However, an ITFS

¹⁴ The protected service areas associated with applications submitted in the ITFS filing window of October 16 - 20, 1995, will be centered on the specified transmitting antenna site coordinates, unless indicated to the contrary by the applicant. The time interval between the effective date of the *MDS Report and Order*, fixing the MDS service areas, and the filing window is approximately one month. We here assume that few, if any, MDS incumbent licensees have filed applications to relocate their transmitting antenna sites within this very short period of time. Therefore, unless we are informed to the contrary, we will assume that the transmitting antenna site coordinates specified in the ITFS applications, as applicable to area protection, agree with the coordinates of the center of the service area of a collocated MDS facility or proposed facility.

licensee should have the flexibility to change its protected area in the event it ceases to lease its channels to a particular system operator. An ITFS licensee relocating its antenna site would then be free to choose the service area of another entity to whom it would lease excess channel capacity. However, such a licensee would change service areas at its own risk and would not be entitled to protection from any MDS or ITFS stations authorized or "previously proposed" at an earlier date.

37. We are mindful that some ITFS licensees are not involved in a wireless cable system and have interference protection only to registered receive sites. We wish to assure ITFS licensees that our amended rule for protection will not alter the current interference protection rules for ITFS receive sites.

8. Clarification of Interference Protection Provided by ITFS Operators to BTA Authorization Holders

38. *Background.* The *MDS Report and Order* gives the BTA authorization holder a BTA-wide protected service area on MDS channels. Paragraph 41 of the *MDS Report and Order* states that where a BTA authorization holder secures a license for a commercial ITFS facility, the associated protected service area will be the entire BTA, and interference protection will be governed in the manner of protecting BTA service on MDS channels.

39. *Pleadings.* A number of ITFS parties, as well as the Association, filed petitions expressing concern about the degree of interference protection to be provided by ITFS operators to the BTA authorization holder. The ITFS Parties and Instructional Telecommunications argue that since the BTA authorization holder receives protected status throughout the BTA on the E- and F-channel groups and the H channels, which are adjacent to the D and G ITFS channel groups, an ITFS operator will only be able to proceed with any new applications or modifications to the ITFS channels with the consent of the BTA authorization holder, even if the ITFS application would not interfere with any of the BTA authorization holders' stations. Petition of ITFS Parties at 6-8; Petition of Instructional Telecommunications at 5-6. National ITFS Association argues that the effect of the provision of the protected service area granted to the BTA authorization holder is to allow the BTA authorization holder power over ITFS licensees on the D- and G-groups, and that this is unacceptable to the educational community. Petition of National ITFS Association at 4. Network for Instructional TV suggests that in order to avoid the preclusive effect for the establishment of new ITFS facilities, a 35-mile protected service area should only be established for commercial ITFS and MDS stations actually applied for and authorized to the BTA authorization holder. Petition of Network for Instructional TV at 6. The Association asks the Commission to clarify that ITFS stations authorized or proposed prior to September 15, 1995, will be permitted to make modifications as long as the power flux density at the boundary of that station's protected service area does not exceed -73 dBw/m². Petition of the Association at 23-25. Without this clarification, they contend, a wireless cable operator using both MDS and ITFS channels will be able to make modifications on the MDS channels and not the ITFS channels.

40. Three petitions included comments related to interference protection to BTA authorization holders. The Association argues that read literally, the protected service area of a BTA authorization holders' commercial ITFS facility will extend to the border of the BTA, effectively precluding most modifications to previously authorized or proposed cochannel ITFS facilities within the BTA. Petition of the Association at 23-25. The Association proposes that if a BTA authorization holder secures a commercial ITFS authorization within its BTA, any previously authorized or proposed ITFS station can subsequently be modified so long as the power flux density at the boundary of that station's protected service area does not exceed -73 dBw/m². *Id.* U.S. Wireless Cable states that Section 21.933 of the revised rules does not provide sufficient interference protection to ITFS stations leased to MDS stations, which have been permitted to request protected service areas equal to that of MDS stations since the 1991 rule amendments. Petition of U.S. Wireless Cable at 5. They contend that ITFS stations used in wireless cable service should be able to receive the same 35-mile protected service area protection as MDS stations. Bell Atlantic's petition included comments indicating that the BTA authorization holders' rights over leased ITFS stations should be broadened. Petition of Bell Atlantic at 10-13. Bell Atlantic states that the *MDS Report and Order* fails to give the BTA operator an adequate opportunity to assure coverage of the BTA with the maximum number of ITFS channels. As a remedy, Bell Atlantic suggests that when the BTA authorization holder also leases ITFS stations, the Commission should permit requests to place multiple transmitters for the ITFS stations, which would extend the reach of wireless cable operations to the boundaries of the BTA, subject to the protection of existing stations.

41. **Resolution.** Petitioners raise the valid concern that our BTA service area and interference protection rules will preclude new facilities and facility modifications by ITFS licensees, if the consent of a BTA authorization holder cannot be secured. This situation arises because our new BTA rules afford the authorization holder BTA-wide protected service on all MDS and commercial ITFS channels. As the rules are presently written, locating a new ITFS station in a BTA could also constitute prohibited encroachment on the rights of a BTA authorization holder. On reconsideration, we wish to make clear that we consider MDS and ITFS to be valuable services, coequally entitled to develop new service and to be protected against electromagnetic interference. We did not intend to preclude ITFS entities from locating stations inside BTAs or from modifying existing facilities. Among coequal services, we have traditionally used the "first in time, first in right" approach for appropriating interference protection rights. Accordingly, we modify our BTA interference protection rules as follows. First, ITFS licensees and new applicants will be responsible for protecting only the authorized or previously proposed stations of BTA authorization holders. Thus, an ITFS applicant will be permitted to file an application proposing to locate a new station in an unused portion of a BTA, provided the proposed facility would meet the interference protection standards with respect to the BTA holder's licensed MDS and commercial ITFS stations and leased ITFS channels. Second, with respect to ITFS applicants for new transmitting facilities filed after the effective date of this proceeding, an authorized or previously proposed BTA station will have an associated protected service area

defined by the 56.33 km (35-mile) circle centered on the transmitting antenna site of the BTA station. This service area would be entitled to the normal interference protection, *i.e.*, desired-to-undesired signal strength ratios of 45 dB and 0 dB for co-channel and adjacent channel operations, respectively.

42. The Association's suggestion that we permit ITFS stations authorized or proposed prior to September 15, 1995, (those included in the wireless cable systems of incumbents) to make modifications subject to not exceeding a limiting field strength at the boundary of their protected service area is meritorious and will be adopted. For this purpose, we will treat ITFS stations who do not lease excess channel capacity in the same manner; *i.e.*, assuming a 35-mile circular area from the then existing transmitting site at which the limiting field strength may not be exceeded. Conversely, as we have previously noted, BTA authorization holders must protect previously authorized or proposed ITFS service within their BTAs, including registered receive sites and previously requested area protection. We are confident that these adjustments to our rules are fair and will permit the MDS and ITFS services to continue to develop on an equal footing. Bell Atlantic's suggestion for use of multiple transmitters in connection with ITFS leases is beyond the scope of this proceeding. Notwithstanding, we would reject this idea for the same reasons we rejected blanket licensing in the MDS service. Each transmitting site, whether for MDS or ITFS stations, must be licensed separately for the reasons we have enunciated.

9. Protection of ITFS Stations Using Older Equipment

43. **Background.** Section 21.902(f)(2) of the Commission's rules requires MDS operators to provide interference protection for adjacent channel ITFS stations constructed before May 26, 1983, at a desired-to-undesired signal strength ratio of 10 dB or greater, unless the MDS operator agrees to upgrade the receive site equipment, in which case the 0 dB standard applies.

44. **Pleadings.** The petition filed by Trans Video included comments on this issue. Trans Video argues that the Commission should continue its long-standing protection of operators using older equipment so that a 10 dB or greater interference protection standard remains in effect for older adjacent-channel ITFS receive sites. Petition of Trans Video at 20-22. Trans Video contends that the rationale for this protection of older ITFS equipment is unchanged in that the standard was originally developed to insure continued service from equipment which may not have been designed to operate in the presence of adjacent channel signals.

45. **Resolution.** In this rulemaking proceeding, we did not change the definition of harmful interference for these older systems.

10. Definition of Incumbents Entitled to Receive Interference Protection

46. **Background.** Section 21.2 of our amended 47 C.F.R. rules defines "incumbent"

as "an MDS station that was authorized or proposed before September 15, 1995, including those stations that are subsequently modified, renewed, or reinstated." 47 C.F.R. § 21.2. Paragraph 3 of the *MDS Report and Order*, defines "authorized or previously proposed facilities" or "incumbents" to include those facilities which were authorized or proposed before June 15, 1995.

47. **Pleadings.** A number of petitions from ITFS groups ask that ITFS operators be included in the definition of incumbents, with Instructional Telecommunications asking that ITFS operators be defined as incumbents whether or not they have leased excess channel capacity. Petition of Network for Instructional TV at 4; Petition of Instructional Telecommunications at 9-10. These petitioners state that failure to include ITFS operators within the definition of incumbents will leave ITFS operators with no interference protection *vis-a-vis* the BTA authorization holders. The Association asks that new Section 21.938(c) of the rules be amended to require that the BTA authorization holder provide interference protection to ITFS authorized or previously proposed MDS stations, as well as incumbent MDS stations. Petition of the Association at 22-23. The Association also asks that the Commission clarify that incumbent status will be determined as of September 15, 1995, the date included in the rules, and not the June 15, 1995, date referred to in paragraph 3 of the *MDS Report and Order*. Petition of the Association at 37. A/B Financial argues that there is a contradiction between the June 15, 1995, date of paragraph 3 of the *MDS Report and Order*, and language in the *MDS Report and Order*, which states that the BTA authorization is conditioned upon any pending application, petition for reconsideration, reinstatement request or application for review affecting any BTA.¹⁵ Petition of A/B Financial at 2-3. A/B Financial contends that it is unclear whether rights are established as of June 15, 1995, or the date of the auction. A/B Financial also asks for clarification of the status of applications which have been dismissed by the Commission, but are currently the subject of appeal at the U.S. Court of Appeals for the District of Columbia Circuit. Petition of A/B Financial at 2-3.

48. **Resolution.** The Commission never intended for ITFS operators to be included in the definition of incumbents. The term "incumbent" is intended to distinguish between MDS licensees who received their authorizations or filed their applications under different filing procedures. Of importance, the ITFS service should be afforded the same interference protection rights afforded MDS incumbents, which we have done herein. See the discussions in ¶¶ 27-28, 30, above.

49. Regarding the issue of the date by which incumbent status is determined, Section 21.2 is correct as written, and should include any stations authorized or proposed before September 15, 1995. We also would like to clarify that paragraph 25 of the *MDS Report and*

¹⁵ A/B Financial asserts that the language conditioning the BTA authorization on pending applications, petitions for reconsideration, reinstatement request or application for review is found at paragraph 58 of the *MDS Report and Order*. It is actually found at paragraph 25.

Order, which states that the BTA authorization is conditioned upon any pending application, petition for reconsideration, reinstatement request or application for review affecting any BTA, also includes the outcome of any pending legal challenge, including the outcome of any appeal in the U.S. Court of Appeals.

11. Clarification of Exemptions to the Power Flux Density Limit at the Protected Service Area Boundary

50. **Background.** Some incumbents' transmitting facilities currently produce a signal that exceeds the allowed power flux density limit at the boundary of the expanded protected service area. Paragraph 57 of the *MDS Report and Order* provides that in those cases the incumbent will be permitted to continue to operate with a power flux density in excess of the limit.

51. **Pleadings.** In its petition for reconsideration, the Association asks that the Commission clarify that the grandfathered status will attach to any MDS facility that is authorized or proposed prior to September 15, 1995, and has, or proposes to have, a power flux density exceeding the -73 dBw/m² at its expanded border. Petition of the Association at 27-28.

52. **Resolution.** Only a small number of authorized and proposed stations now exceed the limiting signal strength at the service area boundary. It was never our intention to provide MDS licensees with a final opportunity to file a modification application to exceed the limiting signal strength density. Therefore, we will grandfather only facilities authorized or proposed on or before the adoption date of the *MDS Report and Order*, June 15, 1995.

12. Treatment of Leased ITFS Stations in Areas Where Protected Service Areas of BTA Authorization Holders Overlap

53. **Background.** The protected service area afforded to the BTA authorization holder for leased ITFS stations is centered at the ITFS transmitting antenna site. *MDS Report and Order* at ¶ 41. In contrast, the protected service area to the BTA authorization holder for leased MDS stations is the larger of the BTA or the lessor station's protected service area. *MDS Report and Order* at ¶ 45. Whenever a BTA authorization holder in adjacent BTAs lease the same ITFS channel group, such that the protected 56.33 km (35-mile) service area (circle) of each extends into the BTA of the other, the BTA authorization holder will not be required to protect that portion of the circle associated with the other authorization holder's side of the boundary, absent any private agreement to the contrary. *MDS Report and Order* at ¶ 41.

54. **Pleadings.** Three petitions were filed on this topic. Bell Atlantic argues that there is no similar rule with regard to MDS stations and that when leasing MDS stations, the BTA authorization holders' protected service area extends to the boundary of the BTA or the lessor station's protected service area, whichever extends further. Petition of Bell Atlantic at

13-14. Bell Atlantic contends that this inconsistency will impair the establishment of a wireless cable system because the useable service area will be reduced to the smallest service area reached by all signals. Bell Atlantic suggests that the Commission should require the BTA authorization holder to provide interference protection for the protected service area of existing MDS stations and leased ITFS stations. Trans Video asserts that the value of the ITFS leases will be adversely affected unless the Commission modifies this proposal. Petition of Trans Video at 5-7. The Association asks the Commission to reconsider its decision to limit the protected service area in cases where the protected service area of leased ITFS stations overlap BTAs, stating that the BTA authorization holder may receive interference on its leased ITFS channels to subscribers outside the BTA under the provision in the *MDS Report and Order*. Petition of the Association at 20-22. The Association suggests that the Commission provide that an ITFS channel leased to a BTA authorization holder have no less than a 35-mile protected service area, even if that protected service area extends into an adjacent BTA.

55. **Resolution.** We will adopt the proposal of the Association on this issue. We agree with petitioners that consistent treatment for MDS and ITFS channels is desirable and will facilitate uniform protected service areas for all channels in a system. We included this provision in the *MDS Report and Order* as a complement to the BTA authorization holder's right of first refusal, which we are also eliminating in this Order.

C. Competitive Bidding Procedures

13. Minimizing Speculation by Increasing Upfront Payments

56. **Background.** The *MDS Report and Order* provided that, for the MDS auction, upfront payments would be equal to approximately five percent of the expected amounts of winning bids for the various BTA service areas. *MDS Report and Order* at ¶ 136.

57. **Pleadings.** PacTel urges the Commission to "take effective steps to minimize the risk of speculation and insincere applications." Petition of PacTel at 8. More specifically, PacTel requests that the Commission to raise the amount of the required upfront payments from approximately five percent of the expected amounts of winning bids for the various BTA service areas to around twenty percent. In addition, PacTel states that the Commission should, in cooperation with the Federal Trade Commission and other agencies, repudiate "extravagant claims by auction promoters about the worth of MDS BTA authorizations." *Id.* at 9.

58. **Resolution.** After consideration, we decline to increase the amount of the upfront payments required for the MDS auction. We realize that requiring higher upfront payments might be more effective in discouraging insincere applicants and speculators from participating in the MDS auction. However, in setting the upfront payment amount for the MDS auction, the Commission must balance the goal of encouraging bidders to submit serious bids with the desire to minimize the costs imposed on bidders, particularly small

businesses. See *Second Report and Order* in PP Docket No. 93-253, 9 FCC Rcd 2348, 2378 (1994) ("*Second Report and Order*"). We believe that the upfront payment amount of approximately five percent of the anticipated winning bids for the BTAs, as established in the *MDS Report and Order*, represents the proper balance between these two competing goals. Moreover, the setting of an upfront payment amount of around five percent of the expected value of the winning bids is consistent with the guidelines laid out in the *Second Report and Order* and followed in previous auctions. See *id.* at 2379. For these reasons, we deny PacTel's petition on this issue.

59. The Commission also notes that it has provided clear warnings to potential bidders about possible "extravagant" claims by auction promoters. In the Bidder Information Package provided to all prospective bidders in the MDS auction, the Commission issued a consumer alert advising bidders about the possibility of deceptive or fraudulent promotions made by unscrupulous entrepreneurs and informing bidders that information about deceptive telemarketing investment schemes is available from the Federal Trade Commission and the Securities and Exchange Commission. This consumer alert is also included in an MDS information sheet provided by the Commission to the public.

14. Eligibility for Small Business Special Measures

60. **Background.** To encourage the participation of small businesses, including those owned by women and minorities, in the provision of MDS system offerings, the *MDS Report and Order* provided reduced upfront payments, bidding credits and installment payments to bidders that qualify as small businesses or as small business consortia. See *MDS Report and Order* at ¶¶ 182-189. A small business is defined as an entity that, together with its affiliates, has average annual gross revenues that are not more than \$40 million for the preceding three calendar years. See *id.* at ¶¶ 190-192.

61. **Pleadings.** Two petitioners request that the Commission reconsider its definition of small business adopted in the *MDS Report and Order*. A/B Financial argues that the Commission should have adopted the standard Small Business Administration ("SBA") definition of small business.¹⁶ See Petition of A/B Financial at 10. PacTel contends that the Commission should reduce its small business benchmark, but suggests no specific level in its petition. See Petition of PacTel at 9. The Association strongly opposes the changes in the definition of small business advocated by A/B Financial and PacTel. See Partial Opposition to Petitions for Reconsideration of the Association at 3-8.

62. **Resolution.** After reviewing these petitions and oppositions, we decline to lower

¹⁶ The SBA standard definition permits an applicant to qualify for financial assistance based on a net worth not in excess of \$6 million with average net income after federal income taxes for the two preceding years not in excess of \$2 million. 13 C.F.R. § 121.802.

the \$40 million gross revenue standard for small business adopted in the *MDS Report and Order*. In summary, we deny the petitions on this issue because we believe the adoption of a substantially lower standard would exclude businesses with the financial wherewithal to operate wireless cable systems competitive with cable television from eligibility for the small business special measures set forth in the *MDS Report and Order*.

63. As we discussed in detail in the *MDS Report and Order*, considerable capital is required to construct a competitive wireless cable system. Tower and head end expenses may range from under \$1 million for a small rural system to \$2 to \$3 million per system in major markets, and the cost of adding each new subscriber has been estimated to be \$400 to \$600. See *MDS Report and Order* at ¶ 191. Given the record evidence indicating that there were substantial capital requirements and the documented difficulties of the wireless cable industry in attracting capital, we concluded that the \$40 million gross revenue standard was appropriate, as it would not prevent companies with the financial ability to construct systems and add subscribers from obtaining the benefits of the small business special measures. See *id.* at ¶ 192.

64. The two petitions challenging the \$40 million gross revenue standard do not persuade us that we were in error in adopting this benchmark. A/B Financial asserts that the SBA standard small business definition should have been adopted, but presents no evidence showing that this definition would be appropriate, given the capital requirements of MDS, and would not exclude enterprises in need of special incentives to compete in the wireless cable industry. Petition of A/B Financial at 10; see also Partial Opposition of the Association at 5 (stating that adoption of SBA small business definition would exclude enterprises of sufficient size to survive in competitive multichannel video distribution marketplace). We additionally note that the SBA itself believes its standard net worth/net income definition may be inappropriate for telecommunications markets.¹⁷

65. PacTel contends that the Commission should make "a simple downward reduction" in the small business definition, but fails to specify in its petition what level it believes would be appropriate. Petition of PacTel at 9. In the absence of persuasive evidence showing that another *specific* standard would be more appropriate than the \$40 million gross revenue benchmark established in the *MDS Report and Order*, we are not

¹⁷ In comments submitted in the general auction rulemaking, the SBA's Chief Counsel for Advocacy argued that the SBA net worth/net income definition was too restrictive and would exclude businesses of sufficient size to survive, much less succeed, in the competitive wireless communications marketplace. The SBA's Chief Counsel advocated the adoption of a revenue test, arguing that a net worth test could also be misleading as some very large companies have low net worth. See *Second Memorandum Opinion and Order*, 9 FCC Rcd 7245, 7268 (1994). We note that only one commenter in the MDS rulemaking expressed support for the standard SBA definition of small business.

inclined to alter our previous decision.¹⁸

66. Moreover, we are not convinced by PacTel's comparison of MDS to PCS that the \$40 million small business standard is inappropriate for MDS. We agree that the capital requirements of broadband PCS are greater than the capital requirements of MDS. However, we determined that the \$40 million small business benchmark was appropriate for MDS in part by comparing the capital costs of MDS with *narrowband* PCS. As noted in the *MDS Report and Order*, "the capital requirements for certain narrowband PCS facilities appear comparable to or even lower than the capital required to construct a viable wireless cable system." *MDS Report and Order* at ¶ 192 n.107; *see also Third Report and Order* in PP Docket No. 93-253, 9 FCC Rcd 2941, 2969, n.40 (1994) ("*Third Report and Order*"). Because the Commission adopted the \$40 million small business standard for narrowband PCS, we believed, with the concurrence of the majority of commenters in the MDS rulemaking, that the adoption of the same standard would be appropriate for MDS. *See MDS Report and Order* at ¶ 192. The submissions of PacTel, which compare the infrastructure costs of MDS with that of *broadband* PCS, do not convince us to reconsider this determination. *See* September 13, 1995 Ex Parte Letter and Exhibits from PacTel; Reply of PacTel at 2-4. Even PacTel's reply, which discusses, for the first time, the build-out costs associated with narrowband PCS, does not support the abandonment of the \$40 million standard. As noted by PacTel, the Commission has estimated that the build-out costs of narrowband systems may range from \$50,000 (for a BTA facility) to \$1.35 million (for an MTA facility), while the costs of regional and nationwide narrowband facilities may be approximately \$3.5 million and \$14.2 million, respectively. *See Third Report and Order* at 2969 n.40; Reply of PacTel at 6 n.7. However, PacTel's own figures estimating the MDS build-out costs associated with small, medium and large markets demonstrate that the costs of constructing a viable MDS system are comparable with the costs of certain narrowband PCS facilities. *See* Reply of PacTel at 4 (estimating build-out costs of a small market MDS system at \$.75 million; of a medium market at \$1.1 million; and of a large market, specifically Los Angeles, at \$13.0 million). A comparison of the MDS build-out costs with the narrowband PCS build-out costs cited above shows these costs to be roughly comparable. For these reasons, we are not persuaded by PacTel's comparison of MDS with PCS to alter

¹⁸ We note that PacTel submitted no comments in the MDS rulemaking pertaining to the appropriate definition of small business. Indeed, only in its reply to oppositions to petitions for reconsideration does PacTel finally suggest that an annual revenue figure of "perhaps" "\$8 to \$10 million" would be more suitable. Reply of PacTel at 3. Moreover, in a late-filed supplement to its reply, PacTel appears to ignore or contradict its suggestion of an \$8 to \$10 million benchmark, and contrarily asserts that the Commission should set "a threshold for a small MDS business in the range of \$3.0-4.5 million." Supplement to Reply to Oppositions to Petition for Reconsideration, with attached statement of Paul R. Milgrom at 6. We find these suggestions as to alternative appropriate standards to be unconvincing, as they are inconsistent, vague, and fail to demonstrate that enterprises in need of special incentives to compete in the multichannel video distribution market would not be excluded.