

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)

)
Amendment of Parts 21 and 74 To Enable)
Multipoint Distribution Service and)
Instructional Fixed Television Fixed)
Service Licensees To Engage In Fixed)
Two-Way Transmissions)

MM Docket No. 97-217

File No. RM-9060

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CONSOLIDATED REPLY

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OFFICE OF THE SECRETARY

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EXECUTIVE SUMMARY

The petitions for reconsideration and subsequent filings in this proceeding reflect a consensus among all but a small, but vocal, minority of ITFS licensees that the Commission's new rules need further revision in order to promote the rapid deployment of wireless broadband services using the MDS and ITFS bands.

There is, for example, widespread support for extending the Commission's streamlined application processing system to all modification applications, not just those for response station hubs and high-power boosters. While the only party opposing that proposal might itself gain from a system that will inevitably result in delay and the use of auctions to resolve competing applications, it offers no public policy justification for abandoning geographic area-based licensing concepts and returning to the failed site-specific rules.

There is also significant support among both commercial and educational interests for new rules that will eliminate the professional installation and advance notification requirements under appropriate circumstances. The record before the Commission provides convincing evidence that retention of those requirements will have an significant adverse impact on the ability of MDS/ITFS-based services to compete against other broadband providers. The proposals by QUALCOMM and the Petitioners in this regard have been strongly endorsed by many. With respect to concerns raised by CTN regarding the Petitioners' proposal to allow the deployment of response stations operating at no more than +18 dBW EIRP, so long as the downconverters at nearby ITFS receive sites are upgraded, in the interest of expediting resolution of this proceeding, the Petitioners do not object to substitution of the CTN proposed characteristics for replacement downconverters. The other opposition to those proposals is based on misconceptions regarding the nature of the proposed new rules.

No reason has been presented for the Commission to reject the Petitioners proposal that only ITFS receive sites registered or constructed before the filing of a response station hub application should be entitled to advance notification and professional installation protection. To the contrary, the comments submitted by certain ITFS interests make clear that unless the Commission acts, some ITFS licensees will continue to deploy spectrally-inefficient downconverters. Similarly, no sound policy reason has been advanced why the Commission should subject response stations operating on MDS channel 1 and 2/2A to those rules.

Finally, there is substantial support in the record for adoption of the Petitioners' proposal that the content and timing of any advance notification of response station activation must be altered. Those who oppose the proposals have failed to adequately respond to the evidence in the record that the new rules will unnecessarily hamper deployment of the wireless broadband services the public demands (and which will generate substantial revenues of leasing ITFS stations).

CONSOLIDATED REPLY

The over 110 parties to the Petition for Rulemaking that commenced this proceeding (collectively, the "Petitioners"), by their attorneys and pursuant to Section 1.429(g) of the Commission's Rules, hereby submit their consolidated reply to the filings by Instructional Telecommunications Foundation, Inc. ("ITF"), Catholic Television Network ("CTN") and Dallas County Community College District, *et al.* ("Dallas Licensees") opposing portions of the Petitioners' request for partial reconsideration of the initial *Report and Order* (the "*R&O*")^{1/} in this proceeding.^{2/}

I. THE COMMISSION SHOULD APPLY ITS NEW STREAMLINED APPLICATION PROCESSING SYSTEM TO ALL ITFS MAJOR MODIFICATION APPLICATIONS.

There has been a groundswell of support by commercial operators *and* educators for the Petitioner's proposal that the new streamlined application processing system be extended to all ITFS major modification applications, and not just restricted to applications for response station hubs and high-power boosters.^{3/} Indeed, only ITF has opposed that proposal.^{4/}

ITF's opposition is hardly surprising given that ITF's own petition for reconsideration asks

^{1/} See *Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service And Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, FCC 98-231, MM Docket No. 97-217 (rel. Sept. 25, 1998) [hereinafter cited as "*R&O*"].

^{2/} The Commission should also note the Petitioners' agreement with the proposal advanced by Cisco Systems, Inc. proposing a reduction in the frequency tolerance requirement for main station and high-power booster transmitters of .001 percent. See *Comments of Cisco Systems in Support of Reconsideration*, at 2-4 (filed Feb. 4, 1999)[hereinafter cited as "Cisco Comment"]. This proposal is vastly superior to the ill-conceived proposal by Spike Technologies, Inc. for complete elimination of the frequency tolerance requirement for such facilities.

^{3/} See, e.g., *Petition of ADC Telecommunications, et al. for Reconsideration*, at 17-19 (filed Dec. 28, 1998)[hereinafter cited as "Petitioners Petition"]; *Petition of National ITFS Ass'n for Reconsideration*, at 8 (filed Dec. 28, 1998); *Petition of Region IV Education Service Center, et al. for Reconsideration*, at 3-6 (filed Dec. 28, 1998)[hereinafter cited as "Joint ITFS Petition"]; *Petition of University of Texas Television*, at 3-4 (filed Dec. 28, 1998); *Petition of San Francisco-San Jose Educator/Operator Consortium*, at 2-3 (filed Dec. 28, 1998)[hereinafter cited as "Educator/Operator Consortium Petition"]; *Petition of C&W Enterprises, Inc. for Reconsideration*, at 5-7 (filed Dec. 28, 1998); *Petition of BellSouth Corp. for Reconsideration*, at 2-7 (filed Dec. 28, 1998).

^{4/} See *Consolidated Opposition of ITF to Petitions for Reconsideration*, at 1-6 (filed Feb. 2, 1999)[hereinafter cited as "ITF Opposition"]. Interestingly enough, while ITF objects to the Petitioners' proposal, it completely ignores the virtually identical proposals for extending streamlined application processing to all ITFS major modifications advanced by a variety of educational and commercial interests. See *supra* note 3.

the Commission to eviscerate the new streamlined application processing system.^{5/} As the Petitioners demonstrated in their opposition to ITF's petition, there is no basis for replacing the new geographic licensing rules (rules that have proven effective in expediting service to the public when used for other services) as ITF proposes with the old site-specific licensing rules that have proven disastrous to wireless cable operators and educators alike.^{6/} The overwhelming opposition to ITF's petition for reconsideration from commercial and educational interests speaks volumes as to the lack of merit in ITF's arguments.^{7/} Since ITF's arguments against extending the streamlined processing system to ITFS major modification applications mirror the arguments it advanced in seeking elimination of that system, the Petitioners will not repeat the arguments they and others advanced in opposition to ITF's petition, but will merely incorporate them by reference.

II. THE ADVANCE NOTICE AND PROFESSIONAL INSTALLATION RULES SHOULD BE SUBSTANTIALLY MODIFIED.

The record establishes clearly that the rules requiring professional installation of all response stations and 20 days advance notice before any response station can be activated within 1960 feet of a registered ITFS receive site are unduly burdensome and do not advance the Commission's desire to "provide increased service to consumers, upgrade the tools available to educational institutions

^{5/} Petition of ITF for Reconsideration, at 4 (filed Dec. 28, 1998).

^{6/} See Consolidated Opposition of Petitioners to Petitions for Reconsideration, at 4-12 (filed Feb. 4, 1999)[hereinafter cited as "Petitioners Consolidated Opposition"].

^{7/} See Opposition of Region IV Education Service Center, *et al.* to Petition for Reconsideration, at 2-6 (filed Feb. 4, 1999)[hereinafter cited as "Joint ITFS Opposition to ITF"]; Opposition of BellSouth Corp. to Petitions for Reconsideration, at 7-8 (filed Feb. 4, 1999); Cisco Comments, at 6. Strangely, although CTN's own petition for reconsideration enthusiastically supported the application of geographic licensing concepts for the processing of all ITFS modification applications, its response to the petitions for reconsideration of others supports ITF. Compare Petition of CTN for Reconsideration and Clarification, at 13-14 (filed Dec. 28, 1998)[hereinafter cited as "CTN Petition"] with Response of CTN to Petitions for Reconsideration, at 20-21 (filed Feb. 4, 1999)[hereinafter cited as "CTN Response"]. While CTN will undoubtedly make a convoluted attempt to conform its two submissions, the inescapable appearance is that CTN has opposed its own petition for reconsideration! In any event, CTN has not addressed the two fundamental problems with the site-specific approach: that the current ITFS processing staff cannot possibly make the determinations of mutual-exclusivity under the site-specific interference criteria within the time frames proposed by ITF; and that adoption of ITF's approach will necessarily result in the use of auctions to resolve mutual exclusivity. By endorsing a proposal that necessarily will involve the use of auctions, CTN once again illustrates the gulf between it and most ITFS licensees.

and enhance the competitive position of MDS operators.”^{8/} As a result, the alternative provisions proposed by the Petitioners, with minor changes discussed below, should be adopted.

A. The Commission Should Exempt Response Stations Operating At An EIRP Of Greater Than -6 dBW And No More Than +18 dBW From The Advance Notice and Professional Installation Rules If Upgraded Downconverters Are Installed At Potentially Affected ITFS Receive Sites.

Both the Petitioners and QUALCOMM Incorporated (“QUALCOMM”) have proposed rules under which response station hub licensees would be exempt from the professional installation and advance notification requirements when deploying response stations transmitting at EIRPs of less than the maximum +33 dBW. QUALCOMM proposed that the rules be inapplicable to response stations operating at no more than -6 dBW.^{9/} The Petitioners, meanwhile, proposed that response stations transmitting at no more than +18 dBW be exempt from the rules with respect to non-cochannel and non-adjacent channel registered receive sites, provided that the license of the associated response station hub replaces the existing downconverters at the registered ITFS receive sites within 1960 feet of the response service area with improved models.^{10/} The record before the Commission supports adoption of both of these proposals.

Most significantly, even CTN agrees with the Petitioners and QUALCOMM, although CTN suggests replacing the Petitioners’ proposed standard for the new downconverter with a requirement that the new downconverter have: (a) a bandwidth of at least the 2500-2686 MHz band; (b) a third-order intercept point of 30 dBm; (c) a conversion gain of 32 dB, or the same conversion gain as the existing downconverter, whichever is less; and (d) a noise figure of no greater than 2.5 dB, or no more than 1 dB greater than the noise figure of the existing downconverter, whichever is greater.^{11/} Although CTN has grossly mischaracterized the Petitioners’ proposal, in the spirit of compromise and in the interest of brevity, the Petitioners will refrain from advancing a point-by-point refutation.

^{8/} *R&O*, at ¶ 2.

^{9/} *See* Petition of QUALCOMM for Reconsideration (filed Dec. 28, 1998).

^{10/} *See* Petitioners Petition, at 11-14.

^{11/} *See* CTN Response, at 13-14.

Instead, it will suffice for the Petitioners to state that they do not object to adoption of CTN's suggested alternative to the Petitioners' approach.^{12/}

Although ITF opposes grant of the Petitioners's proposal, it is laboring under the inexplicable misconception that "the response transmitters which Petitioners seeks to deregulate are authorized to operate with as much as 33 dBw, and thus are capable of creating interference over long distances."^{13/} Of course, the Petitioners' proposal only applies to response stations operating at no more than +18 dBW and only then when improved downconverters are installed.^{14/} The Petitioners have demonstrated, and ITF has not even attempted to refute, that adoption of the Petitioners' proposal will not introduce a material risk of actual interference.

The Dallas Licensees, meanwhile, ask the Commission to retain the 20 day advance notice requirement for all response stations operating from -6 dBW to +8 dBW installed within 150 feet of a registered ITFS receive site, even if an improved downconverter is installed.^{15/} They argue that even with an improved downconverter, there remains a risk of brute force overload if a response station is located within 50 feet of an ITFS receive site (although they do not contest that interference is only a threat at 50 feet when worst case conditions exist -- *i.e.* upstream and downstream transmissions are co-polarized, the response station antenna is boresighted on the ITFS reception antenna and is located at the same height, and there are no intervening foliage or man-made structures).^{16/} However, the Dallas Licensees miss three important points.

First, most ITFS receive sites are located at schools or other institutional buildings that tend

^{12/} The Petitioners note that the installation of this downconverter would not absolve the response station hub licensee of the obligation to cure any interference that does result by deploying even better downconverters or utilizing the other techniques previously identified by the Petitioners. *See* Comments of Petitioners, at 90-100 (filed Jan. 8, 1998).

^{13/} ITF Opposition, at 12.

^{14/} *See* Petitioners Petition, at 11-14.

^{15/} *See* Joint Comments of Dallas County Community College, *et al.*, at 3-4 (filed Feb. 4, 1999)[hereinafter cited as "Dallas Comments"].

^{16/} *See* Dallas Comments, at 4. The Dallas Licensees then ask for an additional 100 foot buffer zone on the theory that the Commission's records are maintained on the basis of coordinates rounded to the nearest second. *See id.*

to be separated by at least 50 feet (and usually much more) from likely response station sites by streets, parking lots, fields, and other open space. Thus, as a practical matter, it is highly unlikely that a response station antenna actually will be located within 50 feet of an ITFS receive antenna.

Second, in the rare case where a response station is located within 50 feet of an ITFS receive site and interference results because one or more of the “worst case” characteristics are present, the ITFS receive site is still highly protected. Under the Petitioners’ approach, at least 60 days before commencing operations a response station hub applicant will be required to serve all ITFS licensees that could suffer brute force overload with an application specifying where response stations may be located and giving the worst-case technical parameters.^{17/} Moreover, the Petitioners have proposed retention of the requirement under Sections 21.909(g)(8) and 74.939(g)(8) that a hub licensee cure any interference caused by downconverter overload. And, since any offending response station will be located within 50 feet of the receive site suffering interference, it should not be difficult to identify even without notice of the specifics of the installation.

Third, the slight risk of interference must be balanced against the adverse impact that the professional installation and advance notice rules have upon the competitive viability of MDS/ITFS-based services. Adoption of the Dallas Licensees proposal (or any approach which precludes an operator from taking steps that will entirely eliminate the advance notice and professional installation requirements) would both delay operator-based installations in the rapid manner necessary for a MDS/ITFS-based service to compete in the marketplace and effectively preclude the use of retail distribution. While the Dallas Licensees attempt to distinguish the rules allowing rapid deployment of response stations by others because they operate using different technology or do not share spectrum with another service,^{18/} those arguments miss the point. If MDS/ITFS-based services

^{17/} See Petitioners Petition, Appendix A, at i, vi (proposed Sections 21.909(d)(4) and 74.939(d)(4)).

^{18/} See *id.* at 9. The Dallas Licensee’s attempt to distinguish ISM operations at 2.4 GHz falls particularly flat. While they assert that ISM operates under a “low power limitation” imposed by Section 15.247 of the Commission’s Rules, the Dallas Licensee’s ignore that the limitation is one on transmitter output power, and that there is no limitation on the EIRP at which transmissions are possible in the ISM band.

are to effectively compete, they must operate on a somewhat level playing field. Prospective customers do not care about differences in technology or whether a service provider is sharing spectrum with ITFS licensees – they want their service immediately. Most of the ITFS community (including the more than 60 ITFS licensees among the Petitioners) recognize that the economic and operational benefits they realize from partnerships with commercial interests justify some risk of theoretical interference in order for the commercial operator to maintain a competitive posture. What the Dallas Licensees are saying, on the other hand, is that the Commission should cripple the ability of MDS/ITFS commercial services to compete if that is what is required to eliminate even the slightest possibility of interference. The Commission abandoned this concept long ago, and it should not be reinstated here.

B. ITFS Receive Sites Registered Or Constructed After The Filing Of A Response Station Hub Application Should Not Be Entitled To Advance Notification And Professional Installation Protection.

In their Petition, the Petitioners demonstrated that because the issues surrounding brute force overload interference result directly from the use of spectrally-inefficient downconverters at receive sites, the Commission should begin shifting the burden for preventing interference to the licensee who has deployed those downconverters. Although the Petitioners did not suggest that the Commission absolve response station hub licensees from their responsibility under Sections 21.909(g)(8) or 74.939(l)(8) for curing actual interference, they proposed that the Commission take a first step by ruling that ITFS receive sites registered or constructed after the filing of a response station hub application should not be entitled to advance notification and professional installation protection.^{19/}

Surprisingly, even this quite moderate proposal drew a vituperative response from a small minority -- the Dallas Licensees and CTN. Yet the Dallas Licensees are mistakenly laboring under the misconception that adoption of the Petitioners' proposal would eliminate notice to cochannel and

^{19/} See Petitioners Petition, at 8.

adjacent channel licensees of proposed upstream operations.^{20/} That simply is not the case. The Petitioners have not proposed any revision to the requirements of Sections 21.909(d)(4) and 74.939(d)(4) that an applicant for a response station hub serve a copy of the application upon every cochannel and adjacent channel licensee or applicant within 100 miles.^{21/} Moreover, the Dallas Licensees and CTN conveniently ignore the proposal by the Petitioners that Sections 21.909(d)(4) and 74.939(d)(4) be amended to require service of every response hub application on each license of, or applicant for, any non-cochannel or non-adjacent channel ITFS station with one or more registered receive sites within 1960 feet of the proposed response service area.^{22/} While CTN disingenuously contends that “[t]he filing of a hub station application is irrelevant to the threat of BFO interference because *response stations*, not hubs, cause interference . . .,” that argument is too cute by half.^{23/} As CTN well knows, the response station hub application sets forth detailed specifics regarding the location and technical characteristics of associated response stations, and service of that applications provides substantial information to the recipient. Thus, the notice concerns expressed by CTN and the Dallas Licensees are misplaced.

According to CTN – albeit without either shame or citation to any controlling Commission authority – “an ITFS licensee is free to install any downconverter it chooses, and may base its decision on economic efficiency rather than on spectrum efficiency . . .”^{24/} Of course, that just is not true. When the Commission addressed brute force overload in the context of the Wireless Communications Service (“WCS”), it made clear that ITFS use of spectrally-inefficient downconverters would no longer be tolerated by denying ITFS receive sites installed after August 20, 1998 protection against overload.^{25/} CTN ignores the WCS precedent for good reason: *the*

^{20/} See Dallas Comments, at 11-12.

^{21/} See Petitioners Petition, Appendix A, at i, vi.

^{22/} See *id.*

^{23/} CTN Response, at 11.

^{24/} *Id.* at 11-12.

^{25/} See 47 C.F.R. §27.58(a)(2).

Petitioners' proposal here is more protective of ITFS than the Commission was in the WCS matter.

The short answer to CTN is that the Petitioners have not proposed to require the installation of any particular downconverter, nor have they even proposed to deny protection to new ITFS receive sites where spectrally-inefficient downconverters are used. Indeed, although the Petitioners believe that the Commission should be requiring the use of better downconverters, in the interest of avoiding further disputes the Petitioners have nonetheless proposed retention of the rules requiring the response station hub licensee to cure any overload interference it causes no matter how poor the downconverter. All the Petitioners ask is that the professional installation and advance notice requirements not apply relative to post-hub application ITFS receive sites – either the ITFS licensee should be installing better downconverters at new sites, or it should bear the risk of slight interference until a cure can be implemented.

C. Response Stations Operation On MDS Channels 1 And 2/2A Should Be Exempt From The Professional Installation And Advance Notice Requirement.

Predictably, the Petitioners' proposal to exempt response stations operating on MDS channels 1 and 2/2A from the advance notice and professional installation requirements was opposed only by CTN. According to CTN, “[t]ransmissions on MDS-1 and MDS-2 are not so far away as to escape detection and amplification in the initial stage of an *unfiltered* ITFS downconverter, and thus are capable of causing brute-force overload.”^{26/} And therein lies the problem – CTN is asking the Commission once again to impose significant impediments in the way of commercial MDS operations because CTN's members apparently have chosen to install unfiltered downconverters that can receive signals 338 MHz or more away from the ITFS band (and are therefore subject to interference from a variety of other sources).

^{26/} CTN Response, at 12. CTN also contends that the restrictions are necessary because an ITFS licensee might engage in a channel swap resulting in it being at the 2150-2162 MHz band. *See id.* However, channel swaps are entirely voluntarily, and any ITFS licensee engaging in such a swap will have ample opportunity to protect itself contractually. Quite frankly, however, the Petitioners would be very surprised if any channel swap resulted in an ITFS licensee using the 2150-2162 MHz band for downstream channels in any event. As a generally matter, licensees are looking at the 2150-2162 MHz band primarily for upstream communications, and any ITFS licensee swapping for a portion of that band likely will be using its spectrum for upstream applications.

Once again, it is important to recall that the Petitioners have proposed that applicants for 2150-2162 MHz response station hubs would be required to serve their applications on all ITFS licensees that might be affected by downconverter overload and that response station hub licensees would be required to cure any interference they cause. Once again, the only question is whether to burden licensees with professional installation and advance notification requirements in order to protect unfiltered downconverters. And, once again, to agree with CTN would be fundamentally unfair, since there is absolutely no excuse for ITFS licensees to be using unfiltered downconverters in an environment where NEXRAD, ISM and point-to-point microwave all operate closer in the spectrum to ITFS than MDS channels 1 and 2/2A and pose significant threats of interference.^{27/}

D. The Content And Timing Of Any Advance Notification Of Response Station Activation Must Be Altered As Proposed By Petitioners.

Only the Dallas Licensees have opposed reducing the advance notice period to one business day, while only they and CTN oppose modification of the content of any advance notification that must be given prior to activating an ITFS receive site. And, once again, both ignore marketplace realities and the views of the ITFS majority in supporting unworkable requirements.

It bears repeating that even with one business day advance notice of the installation of a particular response station, ITFS licensees will have more than 60 days advance notice before any response stations are activated in its vicinity. No wonder, then, that the concept of reducing the 20 day notice period to promote the commercial viability of MDS/ITFS-based commercial services has been endorsed by ITFS licensees^{28/} as well as system operators.

As to how much information an ITFS licensee must be given, CTN again mischaracterizes

^{27/} CTN's efforts to minimize the impact of these other services is disingenuous. For example, CTN claims that because point-to-point microwave and NEXRAD uses large antennas, they are different from MDS. *See id.* at 5-6. However, unless CTN is suggesting that its members regularly go to receive sites and scan the horizon for antennas under construction, ITFS licensees get no advance notification of the activation of these facilities whatsoever. And, while CTN attempts to dismiss the ISM usage because it is subject to transmitter power limitations, CTN concedes, as it must, that high EIRP ISM operations are possible using high-gain antennas. *See id.* at 6 n.14.

^{28/} *See* Joint ITFS Petition, at 6-7; Educator/Operator Consortium Petition, at 6-8; ITF Opposition, at 13.

the record by asserting that "Petitioners . . . do not claim that it would be burdensome to provide the basic information that is now required . . ."^{29/} The Petitioners demonstrated that much of the site-specific information required by the Commission either is impossible to ascertain prior to activation of a response station or is proprietary and commercially sensitive.^{30/} Rather than countering this demonstration with fact, the CTN and the Dallas Licensees merely resort to naked rhetoric. Indeed, *neither CTN nor the Dallas Licensees provide any evidence whatsoever that an ITFS licensee receiving the notification proposed by the Petitioners would be prejudiced.* Given the clear evidence that commercial operators (and the ITFS licensees that rely on commercial operations for funding) would be harmed by retention of the current notification content, and the lack of any evidence that ITFS licensees would be harmed by adopting the Petitioners' proposal, adoption of the Petitioners' approach is clearly in the public interest.

WHEREFORE, for the reasons set forth in the Petitioners Petition, the Petitioners Consolidated Opposition and herein, the Commission should adopt the rule revisions set forth in Appendix A.

Respectfully submitted,

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^{29/} CTN Response, at 9.

^{30/} See Petitioners Petition, at 14-17.

1. Section 21.2 should be amended by adding the following definition:

Documented complaint. A complaint of interference that includes evidence of a good faith effort to resolve the interference problem with the licensee of the allegedly interfering facility, and evidence that the interference is being caused by a facility of the licensee against whom the complaint is filed.

Explanatory note – although the Petitioners do not believe it is necessary for the Commission to modify its rules regarding of interference complaints, the Petitioners have expressed that they do not object to the adoption of certain proposals advanced by CTN, including this one.

2. Section 21.23(c)(1) should be amended by adding thereto the following:

(viii) Except during the 60 day period provided for in Section 21.27(d), any amendment to an application for a new or modified response station hub or booster that reflects any change in the technical specifications of the proposed facility, includes any new or modified analysis of potential interference to another facility, or submits any interference consent from a neighboring licensee.

Explanatory Note – the proposed additional language reflects the Petitioners' proposal that certain amendments to applications for new or modified MDS response station hubs or boosters be deemed major amendments. The effect of the revision is to require amended applications to be treated as newly-filed under the new streamlined processing process, except for amendments submitted during the 60 day settlement period afforded following the first window. See Petitioners Petition, at 18 n. 37.

3. Section 21.31(a) should be amended by revising the first sentence to read as follows:

Except with respect to response station hubs and boosters applied for on the same day or during the same window, (The Commission will consider applications to be mutually exclusive if their conflicts are such that the grant of one application would effectively preclude by reason of electrical interference, or other practical reason, the grant of one or more of the other applications.

Explanatory Note – the proposed revision reflects the decision in Report and Order to utilize streamlined application processing system for MDS response station hub and booster applications and is intended to eliminate any ambiguity.

4. In Section 21.101(a), note 2 should be revised to read as follows:

§21.101 Frequency tolerance.

(a) * * *

~~Beginning November 1, 1991, e~~ Equipment authorized to be operated in the frequency bands 2150-2162 MHz, 2596-2644 MHz, 2650-2656 MHz, 2662-2668 MHz, and 2674-2680 MHz for use in the Multipoint Distribution Service shall maintain a frequency tolerance within .001% of the assigned frequency. MDS booster stations authorized pursuant to §21.913(b) shall maintain a frequency tolerance within .001% of the assigned frequencies. MDS booster stations authorized pursuant to §21.913(e) and MDS response stations authorized pursuant to §21.909 shall employ transmitters with sufficient frequency stability to ensure that the emission stays within the authorized bandwidth.

Explanatory note – The proposed revisions incorporate the proposal by Cisco Systems for a reduction in the frequency tolerance requirement to return to the requirement imposed prior to November 1, 1991.

5. Sections 21.902(f)(1) and (2) should be amended as follows:

(1) Cochannel interference is defined as the ratio of the desired signal to the undesired signal present in the desired channel, at the output of a reference receiving antenna oriented to receive the maximum desired signal. Harmful interference will be considered present when a ~~calculation based on a terrain-sensitive model~~ free-space calculation for an unobstructed signal path determines that this ratio is less than 45 dB (both stations utilizing 6 MHz bandwidths).

(2) ...

(i) Harmful interfacing will be considered present when a ~~calculation based on a terrain-sensitive model~~ free space calculation for an unobstructed signal path determines that this ratio is less than 0 dB (both stations utilizing 6MHz bandwidths).

(ii) In the alternative, harmful interference will be considered present for an ITFS station constructed before May 26, 1983, when a ~~calculation based on a terrain-sensitive model~~ free-space calculation determines that this ratio is less than 10 dB (both stations utilizing 6 MHz bandwidths)

Explanatory note – the proposed revision incorporates CTN's proposal that terrain-sensitive models be utilized, rather than free space calculations, in predicting cochannel and adjacent channel interference.

6. Section 21.904 should be amended as follows:

§ 21.904 ~~Power Limitations~~ Transmitter Power

(a) ...

(b) ...

(c) An increase in station ~~EIRP transmitter power~~

Explanatory note – the proposed revision incorporates CTN’s proposal that the rule be clarified by substituting references to EIRP for references to transmitter power.

7. Section 21.906(d) should be amended by deleting the first sentence.

Explanatory note – the proposed revision incorporates Qualcomm’s proposal that the Commission permit non-directive reception antennas.

8. Section 21.909(d)(4)(v) should be amended, and a new paragraph (vi) added as follows:

(4) A certification that the application has been served upon

* * *

(v) every licensee of, or applicant for, any cochannel or adjacent channel, authorized or previously proposed ITFS station (including any booster station or response station hub) located within 160.94 km (100 miles) of the proposed response station hub, and

~~(vi) every licensee of, or applicant for, any non-cochannel or non-adjacent channel ITFS station (including any booster station or response station hub) with one or more registered receive sites within 1960 feet of the proposed response service area.~~

Explanatory Note – the proposed revision is intended to address concerns expressed during the reconsideration phase of this proceeding that elimination of the 20 day advance notification requirement will harm non-cochannel and non-adjacent channel ITFS licensees by eliminating their only direct notice of the deployment of new response stations. The additional language incorporates proposals advanced by multiple parties to require service of response station hub application on all nearby ITFS licensees. As a result of adoption of this proposal, all potentially-affected ITFS licensees will have at least 60 days advance notice of the area in which response stations may be located and the “worst case” technical characteristics of those response stations. Thus, adoption of this proposed language will obviate the need for ITFS licensees to receive detailed information prior to the activation of specific receive sites.

9. Section 21.909(g)(8) should be amended as follows:

(8) In the event any MDS or ITFS receive site suffers interference due to

block downconverter overload, the licensee of each response station hub with a response service area within five miles of such receive site shall cooperate in good faith to expeditiously identify the source of the interference. Each licensee of a response station hub with an associated response station contributing to such interference shall bear the joint and several obligation to promptly remedy all interference resulting from block downconverter overload at any ITFS receive site registered prior to the submission of the application for the response station hub license or at any receive site within an MDS or ITFS protected service area applied for prior to the submission of the application for the response station hub license, regardless of whether the receive site suffering the interference was constructed prior to or after the construction of the response station(s) causing the downconverter overload; provided, however, that the licensee of the registered ITFS receive site or the MDS or ITFS protected service area must cooperate fully and in good faith with efforts by the response station hub licensee to prevent interference before constructing response stations and/or to remedy interference that may occur. In the event that more than one response station hub licensee contributes to block downconverter interference at a MDS or ITFS receive site, the licensees of the contributing response stations hubs shall cooperate in good faith to remedy promptly the interference. The burden of proving that a facility operated under this section is not causing harmful, unauthorized interference lies on the licensee of the alleged interfering facility, following the filing of a documented complaint of interference by an affected party.

Explanatory note – the proposed revision to paragraph (8) is intended to conform it to paragraph (7), and addresses two issues. First, the purpose of the documented complaint process is to address actual interference, as opposed to predicted interference, which should be addressed in the petition to deny process. Second, under the Commission’s rules, there will often be situations in which actual interference occurs that is permitted under the Commission’s rules. For example, there are myriad instances in which licensees have agreed to accept interference, where the Commission’s rules do not provide protection against interference, or where the Commission has “grandfathered” interference (such as when it expanded the protected service area from a 15 mile to a 35 mile radius). The revision makes clear that in such cases, a complaint of interference cannot be filed. In addition, the Petitioners recognize that a new paragraph (9) will need to be adopted to address the procedures for filing of documented complaints of actual impermissible interference. The Petitioners have previously expressed their support for the approach taken by BellSouth (particularly as clarified to provide that it is inapplicable to predicted interference and to provide for a temporary restraining order), but their willingness to accept the more draconian provisions proposed by CTN for documented complaints (but not for complaints that cannot be documented), subject to certain modifications and to complete elimination of the professional installation and advance notification requirements. For purposes of these proposed rule revisions, it has been assumed that the Commission will retain the professional installation and advance notification requirements for response stations in certain cases. In the event the Commission accepts the Petitioners’ proposal to for adoption of a modified version of CTN’s proposal and a complete elimination of the

professional installation and advance notification rules, then proposed Sections 21.909(n) and 74.939(p) should be eliminated.

10. Sections 21.909(k) and (n) should be amended as follows:

(k) A response station may be operated unattended. The overall performance of the response station transmitter shall be checked by the hub licensee as often as necessary to ensure that it is functioning in accordance with the requirements of the Commission's rules. The licensee of a response station hub is responsible for the proper operation of all associated response stations and must have reasonable and timely access to all associated response station transmitters. ~~Response stations shall be installed and maintained by the licensee of the associated hub station, or the licensee's employees or agents, and protected in such manner as to prevent tampering or operation by unauthorized persons. No response hub may lawfully communicate with any response station which has not been installed by an authorized person, and~~ Each response station hub licensee is responsible for maintaining, and making available to the Commission upon request, a list containing the customer name and ~~address~~ site location (street address and latitude/longitude to the nearest second) of each associated response station, plus the technical parameters (e.g., EIRP, emission, bandwidth, and antenna pattern, height, orientation and polarization) pertinent to each ~~specific~~ the class of each response station.

* * *

(n) ~~Unless otherwise provided, (i) each response station located within a radius of 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the associated response station hub shall be constructed by the licensee of the associated hub station, or the licensee's employees or agents, and (ii) no response station shall be constructed within a radius of 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the associated response station hub unless~~ At least one business day ~~20 days~~ prior to the activation of that a response station transmitter located ~~within a radius of 1960 feet of a registered or previously applied for ITFS receive site,~~ the response station hub licensee ~~notifies~~ must notify, by certified mail, the licensee of the ITFS site of the specific receive site that is within a radius of 1960 feet of the intended response station, the response station hub or hubs with which the intended response station will communicate, and the intention to activate the response station. ~~The notification must contain the street address and geographic coordinates (to the nearest second) of the response station, a specification of the station's EIRP, antenna pattern/orientation/height AMSL, channel(s) to be used, as well as the name and telephone number of a contact person who will be responsible for coordinating the resolution of any interference problems. Such notice shall be given in writing by certified mail, unless the ITFS licensee has requested in writing delivered by certified mail that the response station hub licensee provide notice by electronic mail or facsimile. The provisions of this section shall not apply if:~~

(1) the licensee of the ITFS site has consented to the activation of response stations without compliance with these requirements, or

(2) the response station only will transmit in the 2150-2162 MHz band; or

(3) the response station will operate at an EIRP no greater than -6 dBW; or

(4) the response station will operate at an EIRP no greater than +18 dBW, but no more than - 6 dBW, the licensee of the ITFS receive site does not operate co-channel or adjacent channel to the intended response station, and the response station hub licensee has replaced at its expense the downconverter at all of the receive sites of the ITFS licensee that were registered and built prior to the filing of the application for the associated response station hub license with downconverters with (a) a bandwidth of at least the 2500-2686 MHz band; (b) a third-order intercept point of 30 dBm; (c) a conversion gain of 32 dB, or the same conversion gain as the existing downconverter, whichever is less; and (d) a noise figure of no greater than 2.5 dB, or no more than 1 dB greater than the noise figure of the existing downconverter, whichever is greater. The licensee of the registered ITFS receive site must cooperate fully and in good faith with efforts by the response station hub licensee to install such downconverters. The installation of such downconverters shall not absolve the response station hub licensee of its obligation under paragraph (g)(8) to remedy interference through the use of a downconverter with superior characteristics, filters or other techniques.

Explanatory Note – The revisions proposed above incorporate several different proposals intended to ameliorate the threat that the professional installation and 20 day advance notice requirements pose to the competitive viability of MDS/ITFS based wireless broadband services. Most importantly, it reflects the Qualcomm proposal to exempt response stations operating at no more than -6 dBW EIRP from the professional installation and advance notice requirement and the Petitioners' proposal to exempt from those same rules response stations operating at an EIRP between -6 dBW and +18 dBW, subject to replacement of downconverters at ITFS receive sites with the improved models. The proposed language has been modified since the filing of the Petitioners' petition for reconsideration to define the improved models that must be installed in the manner proposed by CTN, rather than as initially proposed by the Petitioners. Additional language modeled on the provisions of paragraph (g)(8) has been added to make clear that licensee of the ITFS receive site has an affirmative obligation to cooperate with the installation of the improved downconverter. In addition, a sentence has been added to make clear that in the event interference due to block downconverter overload occurs despite the installation of the new downconverter, the response station hub licensee is still obligated under paragraph (g)(8) to take affirmative action to remedy the interference, such as the installation of an even superior downconverter, the use of filters, or the application of other techniques. Also, the proposed language reflects elimination of the professional installation and advance notice requirements where the ITFS licensee entitled to protection consents or where only the 2150-2162 MHz band is being used. Finally, the revised language incorporates the proposal that

would modify the advance notice requirement to one day and modify the notice content and record-keeping requirements.

11. The beginning sentence of Section 21.913(b) should be amended as follows:

(b) An MDS licensee or conditional licensee ~~who is a response station hub licensee, conditional licensee or applicant~~ may secure a license for an MDS signal booster station that has a maximum power level in excess of -9 dBW EIRP (or, when subchannels or superchannels are used, the appropriately adjusted value based upon the ratio of 6 MHz to the subchannel or superchannel bandwidth) and that, ~~if it employs only digital modulation, complies with the~~ uniform power spectral density in accordance with the Commission's *Declaratory Ruling and Order*, 11 FCC Rcd 18839 (1996) (a "high-power MDS signal booster station"). . . .

Explanatory Note – The proposed revisions incorporate the Petitioners proposal that the new rules be amended to clarify that one need not be a response station hub licensee or applicant to secure an MDS booster authorization and to eliminate any suggestion that MDS boosters can only operate using digital modulation. See Petitioners Petition, at 21.

12. Section 74.901 should be amended by adding the following definition:

Documented complaint. A complaint of interference that includes evidence of a good faith effort to resolve the interference problem with the licensee of the allegedly interfering facility, and evidence that the interference is being caused by a facility of the licensee against whom the complaint is filed.

Explanatory note – the proposed rule will conform the ITFS rules to the proposed revision to Section 21.2.

13. Section 74.903(a)(1) and (2) should be amended as follows:

(1) Cochannel interference is defined as the ratio of the desired signal to the undesired signal, at the output of a reference receiving antenna oriented to receive the maximum desired signal. Harmful interference will be considered present when a ~~calculation based on a terrain-sensitive model free space calculation~~ determines that this ratio is less the 45 dB (both stations utilizing 6 MHz bandwidths).

(2) ...

(i) Harmful interference will be considered present when a calculation based on a ~~terrain-sensitive model free space calculation~~ determines that this ratio is less than 0 dB (both stations utilizing 6 MHz bandwidths).

(ii) In the alternative, harmful interference will be considered present for an ITFS station constructed before May 26, 1983, when a ~~calculation based on~~

~~a terrain-sensitive model free-space calculation~~ determines that this ratio is less than 10 dB (both stations utilizing 6 MHz bandwidths)

Explanatory note – the proposed revision incorporates CTN’s proposal that terrain-sensitive models be utilized, rather than free space calculations, in predicting cochannel and adjacent channel interference.

14. Section 74.911 should be amended to read as follows:

(a) Applications for ITFS stations are divided into ~~two~~ **three** groups:

(1) In the first group are applications for new stations ~~or major changes in the facilities of authorized stations~~. These applications are subject to the provisions of paragraph (c) of this section.

~~(2) In the second group are applications for major changes in the facilities of authorized stations. A major change for an ITFS station will be any proposal to add new channels, change from one channel (or channel group) to another, except as provided for in §74.902(f), change polarization, increase the EIRP in any direction by more than 1.5 dB, increase the transmitting antenna height by 25 feet or more, or relocate a facility's transmitter site by 10 miles or more. Applications submitted pursuant to §§74.939 and 74.985 shall not be considered major change applications. Major change applications are subject to paragraphs (e) and (f) of this section. However, the Commission may, within 15 days after the acceptance of an application, or 15 days after the acceptance of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change, and subject to the provisions of paragraph (c) of this section.~~

(23) The ~~second~~ **third** group consists of applications for ~~all other~~ licenses and all other changes in the facilities of authorized stations.

(b) A new file number will be assigned to an application for a new station or for major changes in the facilities of an authorized station, when it is amended so as to effect a major change, as defined in paragraph (a)(~~1~~)**2** of this section, or result in a situation where the original party or parties to the application do not retain control of the applicant as originally filed. An application for change in the facilities of any existing station will continue to carry the same file number even though (pursuant to Commission approval) an assignment of license or transfer of control of such licensee or permittee has taken place if, upon consummation, the application is amended to reflect the new ownership.

(c)(1) (i) The FCC will specify by Public Notice, pursuant to Sec. 73.5002, a period for filing ITFS applications for a new station ~~or for major modifications in the facilities of an authorized station~~. (ii) Such ITFS applicants shall be subject to the provisions of Secs. 1.2105 and the ITFS competitive bidding procedures. See 47

C.F.R. Secs. 73.5000 et seq.

(2) The requirements of this section apply to a wireless cable entity requesting to be licensed on ITFS frequency pursuant to §74.990 of this Part. The application of such a wireless cable entity shall be included in the Public Notice released after the termination of the filing period.

(d) Those applications, other than mutually exclusive applications for new stations, which upon examination meet other pertinent requirements and would serve the public interest, convenience and necessity will be granted. ~~Mutually exclusive applications will be processed pursuant to the provisions in §74.913.~~

(e) Notwithstanding any other provisions of this Part, effective as of September 17, 1998, there shall be one-week window, at such time as the Commission shall announce by public notice, for the filing of ~~major change applications for high-power signal booster station, response station hub, and I channels point-to-multipoint transmissions licenses,~~ during which all applications shall be deemed to have been filed as of the same day ~~for purposes of §§74.939 and 74.985.~~ Following the publication of a public notice announcing the tendering for filing of applications submitted during that window, applicants shall have a period of sixty (60) days to amend their applications, provided such amendments do not result in any increase in interference to any previously proposed or authorized station, or to facilities proposed during the window, absent consent of the applicant for or conditional licensee or licensee of the station that would receive such additional interference. At the conclusion of that sixty (60) day period, the Commission shall publish a public notice announcing the acceptance for filing of all applications submitted during the initial window, as amended during the sixty (60) day period. All petitions to deny such applications must be filed within sixty (60) days of such second public notice. On the sixty-first (61st) day after the publication of such second public notice, applications for ~~new or modified response station hub and booster station licenses~~ ~~ITFS major change applications~~ may be filed and will be processed in accordance with the provisions of ~~§§74.939 and 74.985~~ ~~paragraph (f) of this section.~~ ~~Notwithstanding §74.911(d),~~ ~~EE~~ Each application submitted during the initial window shall be granted on the sixty-first (61st) day after the Commission shall have given such public notice of its acceptance for filing, unless prior to such date either a party in interest timely files a formal petition to deny or for other relief pursuant to §74.912, or the Commission notifies the applicant that its application will not be granted. Where an application is granted pursuant to the provisions of this paragraph, the conditional licensee or licensee shall maintain a copy of the application at the transmitter site or response station hub until such time as the Commission issues a license.

~~(f) Except as provided in paragraph (e), major change applications may be filed at any time. Except during the 60 day period provided for in paragraph (e), any amendment to a major change application that reflects any change in the technical~~

specifications of the proposed facility, includes any new or modified analysis of potential interference to another facility, or submits any interference consent from a neighboring licensee, shall be considered newly-filed. Notwithstanding any other provision of Part 74, major change applications meeting the requirements of Part 74 shall cut-off applications that are filed on a subsequent day for facilities that would cause harmful electromagnetic interference to the proposed facilities. A response station hub, booster or modified ITFS facility authorized pursuant to this paragraph shall not be entitled to protection from interference caused by facilities proposed on or prior to the day the application for the response station hub, booster or modified ITFS facility is filed. ITFS facilities authorized pursuant to this paragraph shall not be required to protect from interference facilities proposed on or after the day the application for the facility is filed. Except as provided by paragraph (e), any petition to deny a major change shall be filed no later than the sixtieth (60th) day after the date of public notice announcing the filing of such application or major amendment thereto. Except as provided in paragraph (e), an application for a response station hub, booster or modified ITFS that meets the requirements of Part 74 this section shall be granted on the sixty-first (61st) day after the Commission shall have given public notice of the acceptance for filing of it, or of a major amendment to it if such major amendment has been filed, unless prior to such date either a party in interest timely files a formal petition to deny or for other relief pursuant to §74.912, or the Commission notifies the applicant that its application will not be granted. Where an application is granted pursuant to the provisions of this paragraph, the conditional licensee or licensee shall maintain a copy of the application until such time as the Commission issues a license.

Explanatory Note – the proposed revisions implement the proposals by various parties to extend the streamlined application processing system adopted in the Report and Order for ITFS response station hubs and high-power boosters to all ITFS major modification applications.

15. Section 74.912(a) should be amended to read as follows:

(a) Any party in interest may file with the Commission a petition to deny any application for new facilities or major changes in the facilities of authorized stations, provided such petitions are filed by the date established pursuant to the cut-off provisions of §74.911(c), (d) and (f). In the case of all other applications, except those excluded under Section 309(c) of the Communications Act of 1934, as amended, ~~and except as provided in §§74.939 and 74.985,~~ petitions to deny must be filed not later than 30 days after issuance of a public notice of the acceptance for filing of the applications. In the case of applications for renewal of license, petitions to deny may be filed after the issuance of a public notice of acceptance for filing of the applications and up until the first day of the last full calendar month of the expiring license term. Any party in interest may file with the Commission a petition to deny any notification regarding ITFS booster stations within the 60 day period provided for in §74.985(e).

Explanatory Note – the proposed revisions reflect the use of streamlined application processing for an expanded range of applications.

16. Section 74.931(c)(3) should be amended to read as follows:

(3) The licensee may shift its requisite ITFS educational usage onto fewer than its authorized number of channels, via channel mapping or channel loading technology, so that it can lease full-time channel capacity on its ITFS station, associated ITFS booster stations, and/or ITFS response stations and associated response station hubs, subject to the condition that it provide a total average of at least 20 hours per channel per week of ITFS educational usage on its authorized channels. ~~If the licensee leases capacity to an operator which utilizes digital transmissions, it may shift its requisite ITFS educational usage onto channels not authorized to it, but which are included in the wireless system of which it is a part ("channel shifting"), so that it can lease full-time channel capacity on its ITFS station, associated ITFS booster stations, and/or ITFS response stations and associated response station hubs, subject to the condition that it provide a total average of at least 20 hours per licensed channel per week of ITFS educational usage.~~ The use of channel mapping or, channel loading and/or channel shifting consistent with the Rules shall not be considered adversely to the ITFS licensee in seeking a license renewal. The licensee also retains the unbridgeable right to recapture, subject to six months' advance written notification by the ITFS licensee to its lessee, an average of an additional 20 hours per channel per week, accounting for all recapture already exercised. The licensee may agree to the transmission of this recapture time on channels not authorized to it, but which are included in the wireless system of which it is a part.

Explanatory Note – the proposed revisions reflect the Petitioners' proposal that ITFS licensees be permitted to channel shift if they are leasing to a commercial operator engaged in digital transmissions, even if the ITFS licensee continues to operate in an analog mode. See Petitioners Petition at 20.

17. Section 74.931(c)(1) should be amended to read as follows:

(1) Before leasing excess capacity on any one channel, the licensee must provide at least 20 hours per week of ITFS educational usage on that channel, except as provided in paragraph (c)(2) of this section. An additional 20 hours per week per channel must be strictly reserved for ITFS use and not used for non-ITFS purposes, or reserved for recapture by the ITFS licensee for its ITFS educational usage, subject to one year's advance, written notification by the ITFS licensee to its lessee and accounting for all recapture already exercised, with no economic or operational detriment to the licensee. These hours of recapture are not restricted as to time of day or day of the week, but may be established by negotiations between the ITFS licensee and the lessee. This 20 hours per channel per week ITFS educational usage requirement and this recapture and/or reservation requirement of an additional 20 hours per channel per week shall apply spectrally over the licensee's whole ~~actual~~

protected service area.

Explanatory Note – the proposed revision reflects the Petitioners’ proposal that the Commission clarify that ITFS licensees are not required to provide educational programming throughout their 35-mile radius circular protected service area if they do not actually transmit into a portion of that area due to antenna pattern, terrain or other blockage or the radio horizon. See Petitioners Petition, at 21.

18. Section 74.931(d)(1) should be amended to read as follows:

(1) The licensee must reserve a minimum of 5% of the capacity of its channels for instructional purposes only, and may not lease this reserved capacity. In addition, before leasing excess capacity, the licensee must provide at least 20 hours per licensed channel per week of ITFS educational usage. This 5% reservation and this 20 hours per licensed channel per week ITFS educational usage requirement shall apply spectrally over the licensee's whole ~~actual~~ protected service area.

Explanatory Note – the proposed revision incorporates the Petitioners’ proposal to accommodate those ITFS licensees that do not serve their entire 35-mile radius circular protected service area if they do not actually transmit into a portion of that area due to antenna pattern, terrain or other blockage or the radio horizon. See Petitioners Petition, at 21-23.

19. Section 74.937(b) should be deleted and reserved.

Explanatory note – deletion of this paragraph will address the concerns expressed by Qualcomm regarding the use of a non-directional transmitting antenna at response station sites and reflect the Commission’s decision in the Report and Order to afford all ITFS licensees a circular protected service area regardless of whether they engage in leasing.

20. Section 74.939(d)(4)(v) should be amended, and a new paragraph (vi) added as follows:

(4) A certification that the application has been served upon

* * *

(v) every licensee of, or applicant for, any cochannel or adjacent channel, authorized or previously proposed ITFS station (including any booster station or response station hub) located within 160.94 km (100 miles) of the proposed response station hub; and

(vi) every license of, or applicant for, any non-cochannel or non-adjacent channel ITFS station (including any booster station or response station hub) with one or more registered receive sites within 1960 feet of the proposed response service area.

Explanatory Note – the proposed new language incorporates the proposal to require service of response station hub applications on all ITFS licensees that could conceivably receive interference due to downconverter overload, even if not operating cochannel or adjacent channel to the applicant. As a result, all such ITFS licensees will have at least 60 days advance notice of the area in which response stations may be located and the “worst case” technical characteristics of those response stations. Adoption of this proposed language obviates the need for ITFS licensees to receive detailed information prior to the activation of specific receive sites.

21. Sections 74.939 (e) and (f) should be deleted and the paragraph numbers reserved:

Explanatory note – the provisions of paragraphs (e) and (f) have been incorporated into revised Section 74.911, which now addresses applications for response station hubs, boosters and major modifications in a consistent fashion. Because of the numerous cross-references in other sections of the rules to paragraph (g)-(p), it is suggested that (e) and (f) be reserved and the remaining paragraphs retain their current designations.

22. Section 74.939(g)(8) should be amended by adding the following sentence at the end:

The burden of proving that a facility operated under this section is not causing harmful, unauthorized interference lies on the licensee of the alleged interfering facility, following the filing of a documented complaint of interference by an affected party.

Explanatory note – the proposed revision to paragraph (8) is intended to conform it to paragraph (7), and addresses two issues. First, the purpose of the documented complaint process is to address actual interference, as opposed to predicted interference, which should be addressed in the petition to deny process. Second, under the Commission’s rules, there will often be situations in which actual interference occurs that is permitted under the Commission’s rules. For example, there are myriad instances in which licensees have agreed to accept interference, where the Commission’s rules do not provide protection against interference, or where the Commission has “grandfathered” interference (such as when it expanded the protected service area from a 15 mile to a 35 mile radius). The revision makes clear that in such cases, a complaint of interference cannot be filed. In addition, the Petitioners recognize that a new paragraph (9) will need to be adopted to address the procedures for filing of documented complaints of actual impermissible interference. The Petitioners have previously expressed their support for the approach taken by BellSouth (particularly as clarified to provide that it is inapplicable to predicted interference and to provide for a temporary restraining order), but their willingness to accept the more draconian provisions proposed by CTN for documented complaints (but not for complaints that cannot be documented), subject to certain modifications and to complete elimination of the professional installation and advance notification requirements. For purposes of these proposed rule revisions, it has been assumed that the Commission will retain the professional installation and advance notification requirements for response stations in certain cases. In the event the Commission accepts the Petitioners’ proposal to

for adoption of a modified version of CTN's proposal and a complete elimination of the professional installation and advance notification rules, then proposed Sections 21.909(n) and 74.939(p) should be eliminated.

23. Sections 74.939 (l), (m) and (p) should be amended to read as follows:

(l) Any MDS or ITFS conditional licensee or licensee who wishes to use one or more of its associated I channels for point-to-multipoint transmissions in a system with one or more authorized, or previously or simultaneously proposed, response station hub(s) shall:

(1) File an application with the Commission, using FCC Form 304 for I channels associated with an MDS station and filing with Mellon Bank in accordance with §1.1104, or using FCC Form 330 for I channels associated with an ITFS station and filing with the Commission in Washington, DC. The application shall specify which of the associated I channels is/are intended for point-to-multipoint transmissions. The applicant also shall certify on the appropriate form that it has complied with the requirements of §74.939(1)(2). Failure to certify compliance and to comply completely with the requirements of §74.939(1)(2) shall result in dismissal of the application or revocation of the authorization for point-to-multipoint transmissions on the relevant I channels, and may result in imposition of a monetary forfeiture. Modification applications to convert I channels associated with ITFS stations to point-to-multipoint transmissions shall be considered ~~minor~~ **major** changes for purposes of §74.911. These applications shall be subject to the procedures set forth in §21.27(d) or §74.911(e) ~~and (f)~~, as appropriate; and

* * *

(m) A response station may be operated unattended. The overall performance of the response station transmitter shall be checked by the hub licensee as often as necessary to ensure that it is functioning in accordance with the requirements of the Commission's rules. The licensee of a response station hub is responsible for the proper operation of all associated response stations and must have reasonable and timely access to all station transmitters. ~~Response stations shall be installed and maintained by the licensee of the associated hub station, or the licensee's employees or agents, and protected in such manner as to prevent tampering or operation by unauthorized persons. No response hub may lawfully communicate with any response station which has not been installed by an authorized person, and~~ Each response station hub licensee is responsible for maintaining, and making available to the Commission upon request, a list containing the customer name and **address site location** ~~(street address and latitude/longitude to the nearest second)~~ of each **associated response station**, plus the technical parameters (*e.g.*, EIRP, emission, bandwidth, and antenna pattern, height, orientation and polarization) pertinent to each **specific the class of each** response station.

(p) Unless otherwise provided, (i) each response station located within a radius of 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the associated response station hub shall be constructed by the licensee of the associated hub station, or the licensee's employees or agents; and (ii) no response station shall be constructed within a radius of 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the associated response station hub unless ~~a~~At least one business day ~~20 days~~ prior to the activation of that a response station transmitter located within a radius of 1960 feet of a registered or previously applied for ITFS receive site, the response station hub licensee ~~notifies~~ must notify, by certified mail, the licensee of the ITFS site of the specific receive site that is within a radius of 1960 feet of the intended response station, the response station hub or hubs with which the intended response station will communicate, and the intention to activate the response station. The notification must contain the street address and geographic coordinates (to the nearest second) of the response station, a specification of the station's EIRP, antenna pattern/orientation/height AMSL, channel(s) to be used, as well as the name and telephone number of a contact person who will be responsible for coordinating the resolution of any interference problems. Such notice shall be given in writing by certified mail, unless the ITFS licensee has requested in writing delivered by certified mail that the response station hub licensee provide notice by electronic mail or facsimile. The provisions of this section shall not apply if:

(1) the licensee of the ITFS site has consented to the activation of response stations without compliance with these requirements; or

(2) the response station only will transmit in the 2150-2162 MHz band; or

(3) the response station will operate at an EIRP no greater than -6 dBW; or

(4) the response station will operate at an EIRP no greater than +18 dBW, but no more than - 6 dBW, the licensee of the ITFS receive site does not operate co-channel or intended response station, and the response station hub licensee has replaced at its expense the downconverter at all of the receive sites of the ITFS licensee that were registered and built prior to the filing of the application for the associated response station hub license with downconverters with (a) a bandwidth of at least the 2500-2686 MHz band; (c) a third-order intercept point of 30 dBm; (b) a conversion gain of 32 dB, or the same conversion gain as the existing downconverter, whichever is less; and (d) a noise figure of no greater than 2.5 dB, or no more than 1 dB greater than the noise figure of the existing downconverter, whichever is greater. The licensee of the registered ITFS receive site must cooperate fully and in good faith with efforts by the response station hub licensee to install such downconverters. The installation of such downconverters shall not absolve the response station hub licensee of its obligation under paragraph (g)(8) to remedy interference through the use of a downconverter with superior characteristics, filters or other techniques.

Explanatory Note – The revisions proposed above will conform the ITFS rule to the proposed revisions to Sections 21.909(k) and (n).

24. Section 74.961(a) should be amended as follows:

(a) The frequency of any ITFS station, or of any ITFS booster station authorized pursuant to §74.985(b), shall be maintained within ± 1 kHz .001% of the assigned frequency at all times when the station is in operation. ITFS booster stations authorized pursuant to §74.985(e) and ITFS response stations authorized pursuant to §74.939 shall employ transmitters with sufficient frequency stability to ensure that the emission stays within the authorized bandwidth. ~~A transmitter licensed prior to November 1, 1991, that remains at the station site initially licensed and does not comply with this paragraph may continue to be used for its life if it does not cause harmful interference to the operation of any other licensee. Any non-conforming transmitter replaced after November 1, 1991, must be replaced by a transmitter meeting the requirements of this paragraph.~~

Explanatory note – The proposed revisions incorporate the proposal by Cisco Systems for a reduction in the frequency tolerance requirement to return to the requirement imposed prior to November 1, 1991.

25. Section 74.985 should be amended by revising the first sentence paragraph (b) to read as follows and by deleting paragraphs (c) and (d) and reserving those paragraphs:

(b) An ITFS licensee or conditional licensee ~~who is a response station hub licensee, conditional licensee or applicant~~ may secure a license for an ITFS signal booster station that has a maximum power level in excess of -9 dBW EIRP (or, when subchannels or superchannels are used, the appropriately adjusted value based upon the ratio of 6 MHz to the subchannel or superchannel bandwidth) and that, ~~if it employs only digital modulation,~~ **complies** with **the** uniform power spectral density in accordance with the Commission's *Declaratory Ruling and Order*, 11 FCC Rcd 18839 (1996) (a "high-power ITFS signal booster station"). . . .

Explanatory Note – The proposed revisions to paragraph (b) incorporate the Petitioners proposal that the new rules be amended to clarify that one need not be a response station hub licensee or applicant to secure an ITFS booster authorization and to eliminate any suggestion that ITFS boosters can only operate using digital modulation. See Petitioners Petition, at 21. The deletion of paragraphs (c) and (d) reflects to proposed consolidation of the rules for response station hub, high-power booster and major modifications of main stations into proposed Section 74.911.

CERTIFICATE OF SERVICE

I, Tammy M. Sendelback, hereby certify that the foregoing Consolidated Reply was served this 18th day of February, 1999, by depositing a true copy thereof with the United States Postal Service, first-class postage prepaid, addressed to the parties listed on the attached list unless otherwise noted:


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