

FCC is required to review applications for completeness and to determine that all previously proposed and licensed facilities have been analyzed or consented. Third, incumbents will have 60 days to file a petition to deny (twice the current petition period), and will also have the right to seek reconsideration within 30 days of grant. In addition, the FCC on its own motion can reconsider a grant. Finally, the holder of an automatically granted authorization will be required to cure interference to incumbents.

As a further safeguard for incumbents, BellSouth urges the FCC to adopt specific procedures for expedited review of interference complaints filed in connection with authorized facilities.<sup>58</sup> BellSouth proposes that within 15 days of the close of the pleadings cycle for interference complaints, which allows 10 days for an opposition after a complaint is filed and 5 days for the complainant to reply, the Commission be required to conduct and complete a settlement conference with the parties. If no settlement is reached within this 15-day period, the Commission would be required to resolve the matter by issuance of a decision within 60 days of the settlement conference.

The timeline would be as follows:

<b>Interference Complaint Filed</b>	<b>Opposition Due</b>	<b>Reply Due/Settlement Conference Period Begins</b>	<b>Settlement Conference Period Ends</b>	<b>FCC Decision Due</b>
	10 days	15 days	30 days	90 days

The entire process would be completed within three-months.

These expedited complaint procedures should be available to resolve interference between incumbents and newcomers, and between newcomers filing on the same day or during the initial

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<sup>58</sup> The Consortium proposes that the FCC adopt expedited dispute resolution procedures similar to those that have been proposed to resolve tower siting disputes. See Consortium Comments at 19-20. While the proposed tower siting procedures have merit, BellSouth believes that the procedures described above are better suited to expeditiously resolving interference complaints involving MDS/ITFS licensees.

window. Under the Petitioners' proposed processing scheme, the FCC will not make determinations of mutual exclusivity and there will be no entitlement to interference protection from concurrently filed applications.<sup>59</sup> Thus, adoption of Petitioners' proposal may result in the automatic licensing of neighboring facilities that could substantially interfere with one another, with neither licensee having any recourse at the FCC in the event the matter cannot be resolved informally between the parties. This is not an acceptable or workable result. Indeed, it would be difficult for BellSouth or any other operator to justify the enormous investment represented by the conversion to digital if there is no mechanism in place to address interference in a fair and expeditious manner. This holds true regardless of whether the interference is between an incumbent and a newcomer, or between two newcomers. The expedited complaint procedures proposed herein should be available to resolve any and all claims of interference.

BellSouth believes that the Commission should not impose any deadline on the filing of interference complaints. It would be far better to afford the parties an opportunity to work cooperatively towards a resolution and invoke formal dispute resolution procedures only if these efforts fail. This would conserve Commission as well as private resources, and is consistent with the Commission's policy of encouraging ITFS/MDS licensees to work together in good faith towards correcting interference.

The adoption of such procedures would allow for the prompt resolution of interference issues and provide ITFS and MDS licensees, incumbents and newcomers alike, with a reliable and timely "safety net." Such procedures also would ensure that unsubstantiated interference complaints are

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<sup>59</sup> Petitioners Comments at 38-42. It follows then that an applicant will have no right to oppose a concurrently filed application on interference grounds, unless the interference is related to already licensed facilities.

expeditiously resolved and dismissed.<sup>60</sup>

BellSouth agrees with Petitioners and other commenters that the current licensing scheme needs an overhaul. Petitioners' proposal of one-day filing windows and automatic grants, modified to incorporate expedited interference resolution procedures, represents a much-improved system that would work to the benefit of ITFS/MDS licensees and wireless operators alike. The public would benefit from the expedited introduction of advanced distance learning services and competitive commercial services. BellSouth urges the Commission to adopt Petitioners' processing scheme, with the refinements discussed above.

**VI. Certain Modifications To The Proposed Interference And Technical Rules Are Essential To Protect Existing Service And To Allow For Prompt Initiation Of New Services To The Public**

**A. The Commission Should Adopt A De Minimis Interference Standard**

As proposed in the NPRM, WONC urges the FCC to retain the existing interference protection criteria of 45 dB for co-channel stations and 0 dB for adjacent channel stations,<sup>61</sup>. WONC also believes that the Commission should add a provision to the rules to address situations where the interference is *de minimis* (i.e., when the interference to a licensee's protected service area is very small, or when the interference is to a portion of the 35 mile protected service area that contains no population.)<sup>62</sup>

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<sup>60</sup> The Alliance of MDS Licensees ("Alliance") argues that the licensee of a station authorized pursuant to the automatic grant procedures should be required to terminate operations merely upon receiving notice of interference. Alliance Comments at 25. This is an invitation for mischief that would not be appropriate under any circumstances. The adoption of expedited complaint procedures would address the Alliance's concerns.

<sup>61</sup> WONC Comments at 5.

<sup>62</sup> WONC Comments at 5-6.

BellSouth supports WONC's call for a *de minimis* interference exception to the above standards. Under such an exception, interference to a small portion of a licensee's protected service area (e.g., less than 3%) or to less populated areas such as mountain tops or desert would not be considered a basis for dismissing an application, regardless of the level of interference.<sup>63</sup> This would promote efficient use of the spectrum by freeing the Commission from rigid application of the interference standards where real-world interference concerns are not implicated.

**B. Terrain Shielding And The Noise Floor Are Appropriately Considered In Interference Analysis**

Petitioners urge the Commission to consider terrain shielding when determining the potential for interference from upstream response transmitters.<sup>64</sup> BellSouth agrees that terrain shielding should be taken into account. Terrain shielding is an appropriate factor to consider for any line-of-sight technology.<sup>65</sup>

Petitioners also propose that interference studies for areas where the desired signal level falls below the appropriate noise floor, should not have to demonstrate compliance with the 45 dB benchmark.<sup>66</sup> BellSouth supports this proposal with the additional caveat that the undesired signal adds to the aggregate C/N+I of the desired signal by no more than 1 dB.

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<sup>63</sup> The adoption of a *de minimis* standard also is consistent with a proposal submitted on January 6, 1998 by Maximum Service Television ("MSTV") in the advanced television proceeding (MM Docket No. 87-268) to adopt a *de minimis* standard to aid broadcasters in their transition to digital operations.

<sup>64</sup> Petitioners Comments at 62.

<sup>65</sup> As a general matter, BellSouth does not support consideration of foliage and building blockage because these factors vary considerably from market to market.

<sup>66</sup> Petitioners Comments at 63.

Consideration of terrain shielding and the noise floor serve not only to simplify the interference analysis as Petitioners acknowledge, but also to limit the number of potentially affected parties that must otherwise consent to the grant of an application. Limiting the universe of affected parties in this way will significantly expedite the application process.

**C. It Is Appropriate To Use Statistical Modeling To Consider The Cumulative Impact Of All Simultaneously-Operating Facilities**

Petitioners support the Commission's proposal that in instances where the primary station, booster stations and/or response stations "share, partially or completely, common spectrum, then the calculations for compliance with the interference standards must come from an aggregation of the power of all three types of stations."<sup>67</sup>

The problem with this approach is that there is no way to determine the exact location of the response stations during the application stage. In recognition of this problem, BellSouth supports the Petitioners' proposal to use statistical models as described in Appendix D of the NPRM to quantify the cumulative noise effect of randomly or population density based distributed noise sources. However, BellSouth recommends the establishment of a working group to refine the modeling process as actual systems are tested and interference issues are resolved.

BellSouth cautions, however, that the applicant must be required to demonstrate that only one response station per channel per RSA is operating at any one time section. Otherwise the applicant must be required to show the actual cumulative effect of the transmissions on incumbent facilities.

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<sup>67</sup> NPRM at ¶ 41; Petitioners Comments at 64.

**D. An Antenna Mask Should Be Established For Response Stations**

Petitioners concede in their comments that there could be significant benefits to limiting the power at which response stations can operate, as the NPRM contemplates.<sup>68</sup> BellSouth supports the Petitioners' suggestion that response station transmitters be limited to 2 watts transmitter output power and 33 dBw EIRP. Because transmitter output power is limited to 2 watts, high gain antennas with improved sidelobe and backlobe performance are needed. Appendix D to the NPRM requires an aggregate pattern of all antennas to be used in a system for interference analysis. This aggregate pattern must be linked to a specific response hub and response transmitters must be aimed at that response hub. Accordingly, BellSouth recommends that an antenna mask be established for sidelobes, backlobes and cross-polarization relative to an absolute gain DBi standard rather than a relative gain standard referenced to the main beam.<sup>69</sup>

**E. No Further Testing Is Needed Before Licensees Should Be Authorized To Employ QPSK And CDMA**

Petitioners urge the Commission to authorize QPSK and CDMA modulation formats.<sup>70</sup> However, analysis between networks utilizing different bandwidths may require normalization to a common power spectral density.

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<sup>68</sup> Petitioners Comments at 56.

<sup>69</sup> BellSouth recommends that an antenna type acceptance procedure and standard be established for receive-only stations, response stations, and response station hubs. All transmitting antennas should be certified for a maximum approved transmitter power based upon maximum power density radiated in an undesired direction over a short time interval based upon the detectable impacts upon both digital and analog MDS incumbent systems.

<sup>70</sup> Petitioners Comments at 116.

**F. There Is No Confusion In The Industry Regarding Specification Of The Proposed Emission Mask**

The Petitioners believe that given the fact that a multitude of different bandwidths will be usable upon adoption of the proposals in the NPRM, specification of a single resolution bandwidth will be “problematic at best.”<sup>71</sup> Petitioners propose that the licensee choose the actual resolution bandwidth to be used to demonstrate compliance.<sup>72</sup> BellSouth agrees, with the following clarification. In the NPRM, the Commission proposes use of a 100 kHz resolution bandwidth for all spectral measurements.<sup>73</sup> The bandwidth of the spectral content of the modulation must be at least 10 times larger than the resolution bandwidth. Attenuation of out-of-band measurements is relative to in-band power within a 100 kHz bandwidth. Based on discussions with transmitter manufacturers, BellSouth believes that the spectral mask procedures as specified in the NPRM are within reason and the 100 kHz resolution bandwidth is adequate for such measurements.

Next Level Systems, Inc. (“NextLevel”) believes the proposed measurement technique set forth in the NPRM may cause confusion to an incumbent familiar with measuring analog modulations.<sup>74</sup> BellSouth believes that there is little potential for confusion. As the measurement of spectral masks results in a relative measurement of the in-band signal power to the out-of-band signal power, the ratio will remain the same as long as the resolution bandwidth is common for both measurements. It is essential, however, that the spectral bandwidth being measured be large relative to the resolution bandwidth as the resolution bandwidth acts to integrate the power off the center

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<sup>71</sup> Petitioners Comments at 128.

<sup>72</sup> Petitioners Comments at 128.

<sup>73</sup> NPRM at ¶ 22.

<sup>74</sup> NextLevel Comments at 3.

frequency. BellSouth is well aware of this effect and takes steps to compensate for any discrepancy this might cause in the spectral response. Of more importance is that the sampling of the spectral mask must be less than the resolution bandwidth to assure accurate measurement of the spectral mask for narrow band carriers.

**G. Response Stations Should Not Be Allowed To Transmit Unless In The Same Manner Licensed As Booster Stations**

Spike Technologies, Inc. (“Spike”) proposes to amend the definition of a “response station hub” to allow such facilities to retransmit as well as receive information transmitted by one or more response stations.<sup>75</sup> BellSouth submits that to the extent this proposal is adopted by the Commission, such retransmitting hubs should be licensed in the same manner as boosters, in order to ensure interference protection to incumbent licensees. BellSouth points out that other technologies such as point-to-point microwave, fiber or coaxial cable can be used to relay upstream transmissions to make more efficient use of the limited MDS/ITFS spectrum.

**Conclusion**

It would not serve the public interest or the interests of ITFS licensees and wireless cable operators to significantly increase the amount of airtime set aside for ITFS usage, to subject existing ITFS leases to further regulatory review, or to maintain outdated restrictions on ITFS lease terms. Artificial restraints such as these will make it considerably more difficult, and in many cases impossible, for licensees and wireless operators to make maximum use of new technologies and expeditiously translate technological advancements into viable and robust services to the public. The Commission must streamline the ITFS/MDS application process in the manner described above, and adopt technical rules that allow for efficient use of the spectrum and provide licensees and wireless

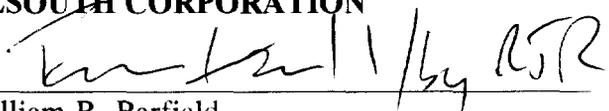
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<sup>75</sup> Spike Comments at 3.

operators necessary freedom and flexibility in station and system design while ensuring continuity of high quality service to the public.

Respectfully submitted,

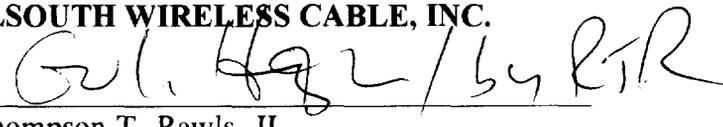
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