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

In the Matter of	)	
	)	
Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands	)	WT Docket No. 03-66 RM-10586
	)	
Part 1 of the Commission's Rules – Further Competitive Bidding Procedures	)	WT Docket No. 03-67
	)	
Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service to Engage in Fixed Two-Way Transmissions	)	MM Docket No. 97-217
	)	
Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing In the Multipoint Distribution Service and the Instructional Television Fixed Service for the Gulf of Mexico	)	WT Docket No. 02-68 RM-9718

To: The Commission

COMMENTS
OF
BELLSOUTH CORPORATION AND BELLSOUTH WIRELESS CABLE, INC.

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Summary

In this proceeding, the Commission has a clear opportunity to promote competition, innovation and investment in advanced wireless services. BellSouth Corporation and BellSouth Wireless Cable, Inc. (collectively, "BellSouth") believe that the Commission can achieve these goals by quickly adopting certain rule changes and forbearing from imposing eligibility and service restrictions for MMDS and ITFS licensees. The Commission also should simplify the licensing process and delete obsolete and unnecessary regulatory burdens from these services.

First, the Commission should adopt the MMDS/ITFS spectrum rebanding plan proposed by the coalition of MMDS and ITFS interests (the "Coalition").[1] This plan presents the best means to eliminate interference issues resulting from the existing interleaved channel allocation scheme, and affords licensees and consumers flexibility and scalability in service offerings, spectrum efficiency and facilities-based competition. MMDS and ITFS licensees will have contiguous spectrum available for cellularized operations and, given the lesser amount of spectrum required, the reconfigured band can accommodate multiple operators providing competing or differentiated services, as dictated by consumer demands. The Coalition Plan also preserves incumbent high-power uses in a mid-band segment that separates the upper and lower bands, thereby ensuring that both TDD and FDD technologies can be implemented. The alternative band plans suggested by the Commission do not offer these same benefits, and are less spectrally efficient or do not permit existing high-power operations to continue.

[1] *See* "A Proposal for Revising the MDS and ITFS Regulatory Regime," submitted by the Wireless Communications Association International, Inc., the National ITFS Association and the Catholic Television Network, RM-10586 (filed October 7, 2002). The Coalition further supplemented the Initial Coalition Proposal through its Comments (First Supplement) in RM-10586 (filed November 14, 2002), its Reply Comments (filed November 29, 2002) and its Second Supplement (filed February 7, 2003). These filings will be collectively referred to herein as the "Coalition Plan."

Second, the Commission should implement geographic area licensing and streamline application procedures for the MMDS and ITFS services. With geographic area licensing – as contrasted with the antiquated site-based licensing that is currently in place – service can be implemented quickly, often without the need for detailed interference showings or Commission staff processing. Streamlining and consolidating application processing also will expedite service to the public.

Third, the Commission should retain open eligibility rules to enable digital subscriber line ("DSL") providers to hold and acquire MMDS and ITFS spectrum rights. There is no legal or factual justification for the Commission to prohibit DSL providers from holding MMDS and ITFS spectrum rights. Imposing such restrictions would be contrary to the Commission's two-part standard, rooted in the Communications Act, which states that "eligibility restrictions should be imposed only when (1) there is a significant likelihood of substantial competitive harm in specific markets, and, (2) only when eligibility restrictions are an effective way to address such harm."[2] No such finding has been made here, nor can it – the market for the advanced services that MMDS and ITFS licensees will deploy has yet to evolve, and may in fact be different from market to market depending on the desires of consumers. Nor is there any basis for the Commission to be concerned that DSL providers will acquire MMDS and ITFS spectrum for anticompetitive purposes; because the rebanded spectrum can accommodate multiple operators, there is no incentive for DSL providers to warehouse spectrum. To the contrary, DSL providers are perhaps best able to deploy MMDS/ITFS spectrum by integrating the wireless network with the wired network to serve unserved and underserved areas where a wired solution is not viable. Either as a first service to these areas – many of which are rural – or as a first competitor to

[2] *NPRM*, ¶121, *citing* 47 U.S.C. §151.

market-dominant cable modem services, DSL providers have the resources and expertise to rapidly and efficiently deploy an MMDS/ITFS broadband platform. In previous cases, the Commission has found these qualities to be critical in promoting the Commission's objectives, and the same outcome should result here.

Fourth, the Commission should prohibit "underlay" use of the MMDS and ITFS spectrum by unlicensed devices. There is no record whatsoever to support the proposition that the spectrum can responsibly accommodate multiple users without disruptive interference. Even in other proceedings where test results and studies have been analyzed, the results are far from clear. The Commission's ability to enforce any penalties for improper use of unlicensed devices would be ineffective because they could only be imposed after the interference has disrupted vital communications transmissions.

Fifth, the Commission should relax its MMDS BTA construction and service rules. As it has done in other services launched after the MMDS auction, the Commission should extend the build-out period to coincide with the end of the initial MMDS BTA authorization term, and afford licensees a renewal expectancy upon a demonstration that they provided "substantial service" during the license term.

Finally, the Commission should permit market forces to determine deployment of advanced wireless services to rural areas. The Commission has found that the rural broadband market is developing in a reasonable and timely manner, in the absence of any such requirements. Rather than imposing rural service obligations, the Commission should instead, as it intends in this proceeding, create a regulatory environment that will promote competition, innovation and investment in wireless broadband services, and eliminate unnecessary regulatory burdens.

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To: The Commission

COMMENTS
OF
BELLSOUTH CORPORATION AND BELLSOUTH WIRELESS CABLE, INC.

BellSouth Corporation and its wholly-owned subsidiary BellSouth Wireless Cable, Inc. (collectively, "BellSouth") hereby submit Comments on certain of the proposals and suggestions contained in the Notice of Proposed Rule Making and Memorandum Opinion and Order ("*NPRM*") in the above-captioned proceeding.[1]

[1] *See Notice of Proposed Rule Making and Memorandum Opinion and Order*, FCC 03-56, 17 FCC Rcd 6722 (2003). A summary of the *NPRM* was published in the Federal Register on June 10, 2003. *See* 68 FR 34560 (2003). By *Order*, FCC 03-169, released July 10, 2003, the Commission modified and clarified the *NPRM* with respect to applications for extension of time to construct and build-out deadlines for Basic Trading Areas ("BTAs"). By *Second Memorandum Opinion and Order*, FCC 03-194, released August 8, 2003, the Commission lifted the freeze

BellSouth supports many of the Commission's proposals, and offers these Comments to address issues that are of the highest importance and relevance to the Commission's public interest objectives. Specifically, BellSouth believes the Commission should:

- Adopt the MMDS/ITFS spectrum rebanding plan proposed by the coalition of MMDS and ITFS interests (the "Coalition");[2]
- Implement geographic area licensing and streamline application procedures;
- Retain open eligibility rules to enable digital subscriber line ("DSL") providers to hold and acquire MMDS and ITFS spectrum rights;
- Maintain its prohibition on unlicensed use of MMDS and ITFS channels;
- Extend the MMDS BTA build-out period to coincide with the end of the BTA license term and adopt a "substantial service" standard with appropriate "safe harbors;" and
- Permit market forces to determine deployment of advanced wireless services to rural areas.

Background

BellSouth is an incumbent MMDS/ITFS operator with significant investment in the industry and a desire to provide advanced services to consumers efficiently and economically. It therefore has a stake in the outcome of this proceeding and the prospects that a more flexible regulatory system will create.

In the early 1990s, BellSouth saw an opportunity in the MMDS/ITFS service to offer video entertainment and educational programming in competition with cable service. Beginning in 1996, BellSouth acquired MMDS/ITFS spectrum rights in numerous markets throughout nine

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on the filing of MMDS applications and ITFS major change applications.

[2] *See* "A Proposal for Revising the MDS and ITFS Regulatory Regime," submitted by the Wireless Communications Association International, Inc. ("WCA"), the National ITFS Association and the Catholic Television Network, RM-10586 (filed October 7, 2002) (the "Initial Coalition Proposal"). The Coalition further supplemented the Initial Coalition Proposal through its Comments (First Supplement) in RM-10586 (filed November 14, 2002), its Reply Comments (filed November 29, 2002) and its Second Supplement (filed February 7, 2003). These filings will be collectively referred to herein as the "Coalition Plan."

Southeastern states.[3] In several markets – Atlanta, New Orleans, Jacksonville, Orlando and Daytona Beach – BellSouth expended millions of dollars in engineering, equipment and operational costs to convert the then-existing analog systems to digital video services, and has offered hundreds of channels of high-quality programming to tens of thousands of customers. BellSouth maintains analog operations on its systems in Fort Myers, Miami, Lakeland, Louisville and smaller, rural markets surrounding Atlanta. BellSouth remains one of the largest holders of licensed and leased MMDS and ITFS spectrum rights in the United States.

In December 2000, BellSouth announced that it would restructure its wireless video service in order to focus on its core businesses. Other wireless video operators made similar decisions. At present, BellSouth's MMDS/ITFS systems still provide video service to subscribers.

BellSouth remains committed to offering video service to consumers. BellSouth currently provides cable service in 14 franchise areas in Alabama, Florida and Georgia.[4] On August 27, 2003, BellSouth announced a strategic marketing alliance with DIRECTV to offer BellSouth's residential customers DIRECTV digital satellite television service at discounted rates.[5]

Since 2000, BellSouth has actively evaluated the use of MMDS/ITFS spectrum for broadband wireless access and other services. BellSouth believes that this spectrum can and

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[3] These nine states are Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee.

[4] The 14 operating cable franchises are in the following communities: City of Vestavia Hills, Alabama; Town of Davie, Florida; Miami-Dade County, Florida; City of Pembroke Pines, Florida; St. Johns County, Florida; Cherokee County, Georgia; Cobb County, Georgia; DeKalb County, Georgia; Gwinnett County, Georgia; City of Chamblee, Georgia; City of Duluth, Georgia; City of Lawrenceville, Georgia; City of Roswell, Georgia; and City of Woodstock, Georgia.

[5] *See* Press Release, "*BellSouth® and DIRECTV® Announce Agreement to Sell Digital Satellite Service as Part of BellSouth Answers℠ Bundle*," released August 27, 2003.

should be utilized as an alternative or complimentary means of delivering broadband access and other advanced wireless services to the public. In furtherance of this goal, BellSouth has:

- Supported efforts to create and adopt rules that would permit flexible, two-way use of the spectrum. For instance, it filed Comments, Reply Comments and petitions for reconsideration in the proceeding that first authorized two-way services;[6]

- Participated in the proceeding that permitted mobile operations on MMDS and ITFS spectrum;[7] and

- As a member of the WCA, made meaningful substantive contributions to the Coalition Plan, and wrote separately to support adoption of the *NPRM*.[8]

With an eye on the future provision of advanced services to consumers, BellSouth has been conducting a technical trial of new wireless equipment in Daytona Beach, Florida since the beginning of this year, deploying base stations and customer premises equipment ("CPE") manufactured by Navini Networks, Inc. and utilizing WCS frequencies. The trial is testing coverage, capacity and throughput to determine whether this wireless technology can be used to provide service in an economical manner where current technological limitations prevent wired DSL service from being extended. Users self-install the CPE and receive service comparable to BellSouth's wired DSL offering at up to 1.5 MB/second. A few customers use the technology in a "limited portability" mode. The trial results are meeting expectations, and user reaction has been very positive. BellSouth is planning to conduct further trials in the Daytona Beach and

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[6] *See* Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Two-Way Transmissions, *Report and Order*, 13 FCC Rcd 19112 (1998), *recon.*, 14 FCC Rcd 12764 (1999), *further recon.*, 15 FCC Rcd 14566 (2000).

[7] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, *First Report and Order and Memorandum Opinion and Order*, 16 FCC Rcd 17222 (2001).

[8] *See, e.g.*, letter from Karen B. Possner of BellSouth Corporation to Thomas L. Sugrue, Chief of the FCC's Wireless Telecommunications Bureau dated October 10, 2002, and Comments of BellSouth Corporation and BellSouth Wireless Cable, Inc. dated November 14, 2002, both of which demonstrated support for the Coalition Plan.

Atlanta markets on both MMDS and WCS frequencies, testing coverage over more difficult terrain, customer self-installation success, additional traffic loads and interference from SDARS transmitters.

Clearly, the MMDS/ITFS industry is at a turning point, poised to introduce new advanced services to consumers. The Commission can take an important and necessary next step in achieving its public policy objectives and fulfilling the promise this spectrum holds by quickly adopting the proposals in the Coalition Plan – and by forbearing from adopting certain suggestions in the *NPRM* that would be contrary to the public interest.

Discussion

I. BELLSOUTH SUPPORTS PROPOSALS THAT WILL ADVANCE THE COMMISSION'S PUBLIC INTEREST OBJECTIVES.

BellSouth commends the Commission for answering the MMDS/ITFS industry's call for regulatory changes designed to maximize the public interest benefits that would follow from adopting the proposals in the Coalition Plan. Absent Commission action, the MMDS and ITFS spectrum will remain subject to unnecessary and burdensome regulation that will continue to thwart its ability to serve as a platform for providing advanced wireless services to consumers.

In the *NPRM*, the Commission identified the overall objectives of this proceeding:

- Promote availability of broadband to all Americans, including technologies for educators;
- Clarify and stabilize the regulatory treatment of similar spectrum-based services; and
- Facilitate development of possible alternative broadband residential facilities-based providers.[9]

[9] *NPRM*, ¶¶33-35.

The Commission also described the numerous benefits that its new rules are expected to achieve, stating that:

> the Commission seeks to promote competition, innovation and investment in wireless broadband services, and to promote educational services. Additionally, the Commission also seeks to foster the development of innovative service offerings to consumers as well as educational, medical and other institutions, simplify the licensing process and delete obsolete and unnecessary regulatory burdens.[10]

BellSouth believes that the Commission can best advance these public interest objectives by adopting the essential elements of the Coalition Plan and rejecting ideas proffered in the *NPRM* that would run contrary to these objectives.

A. The Spectrum Rebanding Plan Described In The Coalition Plan Best Advances The Commission's Public Interest Objectives.

The current MMDS/ITFS band plan clearly is a relic from a bygone era, when interference problems inherent in television receiver technology precluded the use of adjacent channels.[11] The regulatory structure governing MMDS and ITFS therefore must be overhauled and simplified to address the realities of today's technology, today's competitive environment, and today's need for rapid deployment. The Commission acknowledges these realities and proposes many regulatory reforms consistent with the public interest objectives cited by the Commission. In other respects, however, the *NPRM* offers alternatives that fall short of the reasoned proposals and analysis contained in the Coalition Plan.

The centerpiece of the *NPRM* is a series of alternatives to the existing interleaved channel plan for MMDS and ITFS. Of these, the Coalition Plan stands head and shoulders above the

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[10] *Id.*, ¶1.
[11] *See* Initial Coalition Proposal, pp.1-11.

existing configuration and the other suggested band plans in reflecting the Commission's public interest objectives.

The Coalition Plan would divide the band into three distinct segments: (1) a Lower Band Segment ("LBS") consisting of twelve 5.5 MHz channels extending from 2500-2566 MHz for Channels A1-A3, B1-B3, C1-C3 and D1-D3; (2) a Mid Band Segment ("MBS") with seven 6 MHz channels extending from 2572-2614 MHz for Channels A4, B4, C4, D4, E4, F4 and G4; and (3) an Upper Band Segment ("UBS") consisting of twelve 5.5 MHz channels extending from 2620-2686 MHz for Channels E1-E3, F1-F3, H1-H3 and G1-G3. The bands would be separated by two 6 MHz blocks of transition band, which would be divided equally among the various licensees.[12]

The Coalition Plan appropriately balances the need to promote spectrally efficient advanced services, flexibility and scalability in service offerings with the desire to preserve incumbent operations, especially those providing educational programming. The Coalition Plan recognizes that, in order to initiate a viable service, an operator does not need access (in its own name or by lease) to all of the MMDS/ITFS spectrum in a given market.

It also acknowledges that multiple MMDS/ITFS operators using different facilities (and perhaps different technologies, FDD or TDD) may aggregate sufficient amounts of spectrum to offer competitive or differentiated services. For instance, under the Coalition Plan, a TDD operator could utilize the A1-A3/B1-B3 channels (a total of 33 MHz), leaving similar channel groupings on the C1-C3/D1-D3, E1-E3/F1-F3 and H1-H3/G1-G3 blocks for use by other operators to provide competitive advanced services or offer unique services or serve areas that

[12] *See NPRM*, ¶31 and Appendix C, ¶3. BellSouth agrees with the technical standards proposed by the Coalition, namely: (1) the channelization plan of placing three 5.5 MHz channels in either the LBS or UBS, one 6 MHz channel in the MBS, and 500 kHz in the transition bands; (2) the need for 6 MHz of transition band to separate the

are not served by the A1-A3/B1-B3 operator. Similarly, an FDD operator could utilize the A1-A3/E1-E3 channel pairs, leaving the B1-B3/F1-F3, C1-C3/H1-H3 and D1-D3/G1-G3 channel pairs available for other operators. In each case, the Coalition's band plan would help foster opportunities for facilities-based competition to emerge.

The separation of the LBS and the UBS is a critical element of the Coalition Plan for two reasons. First, it meets the requirements of FDD technology without impairing the adoption of TDD technologies by other operators. In an FDD configuration, channels are paired, and there must be sufficient separation between the channels to ensure that the upstream and downstream paths do not interfere with each other. Without adequate separation between channel pairs, expensive filtering equipment would need to be utilized, driving up CPE costs substantially and thereby increasing costs to consumers. Thus, the proposed separation would allow FDD technology to remain available for MMDS and ITFS, encourage further innovation and promote competition within the equipment manufacturing industry. This band separation would ensure a technology-neutral playing field, allowing both FDD and TDD technologies to compete.

Second, by creating the MBS, the Commission would preserve existing high-power operations, including distance-learning and other educational video programming. The Coalition Plan consolidates these operations in the MBS and substantially reduces the potential for harmful interference, without reducing the amount of a licensee's spectrum.[13]

MBS from the LBS and UBS; and (3) the need for a single nationwide band plan.

[13] Indeed, with the fourth ITFS channel segregated from the other three, ITFS licensees might very well experience a net increase in the amount of spectrum that would actually be used for qualified educational programming. Under current rules, ITFS licensees are required to maintain a minimum of 5% of their digital airtime for such uses. As currently envisioned, it is not likely that the fourth channel (in the MBS) would be used as part of a low-power system in conjunction with the LBS and UBS, meaning that a 6 MHz channel – 25% of the spectrum allocated under a four-channel ITFS license – would be entirely available for high-power services. BellSouth does not advocate a rule change raising the 5% minimum because, although that may be the outcome in many cases, ITFS licensees and lessors should be free to negotiate airtime usage and other terms of their relationship without artificial regulatory barriers. Moreover, if the FCC changes its rules to permit ITFS licensees to sell their licenses to parties that are now

The Commission should reject the other alternatives identified in the *NPRM* because they do not offer comparable public interest benefits. The proposal to create two 45 MHz low-power segments and two high-power segments[14] requires three guard bands instead of the two proposed in the Coalition Plan and thus is less spectrally efficient than the Coalition's segmentation plan. Moreover, with only 90 MHz set aside for low-power operations, the spectrum would accommodate fewer potential low-power operators, with the prospect that some spectrum would be left over and unusable for advanced services.[15] With 132 MHz allocated to the LBS and UBS for low-power operations, the Coalition Plan more accurately reflects the marketplace need for more low-power spectrum to accommodate the demand for and expected growth of advanced services.

Likewise, the suggestion to segment the spectrum into a single low-power band and a single high-power band restricts flexibility and creates debilitating problems for FDD deployment.[16] Deployable FDD requires frequency pairs, one for upstream transmissions and one for downstream. Though it would be possible to use the high-power band for advanced services, massive interference problems could result if an operator in a nearby market were to use the same spectrum for high-power video services. For all practical purposes, if the Commission were to adopt this proposal, it would be dictating that FDD technology should not be available to consumers in the MMDS and ITFS services. Moreover, the Commission would effectively eliminate any incentive to develop FDD as an alternative technology platform.

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ineligible to hold ITFS licenses, it would be inconsistent for leases to contain limits on the amount of excess capacity that could be leased.

[14] *See NPRM*, ¶52.

[15] Notably, the Commission does not explain how individual licenses within this band would be channelized. If channels for low power operations are to have 5.5 MHz of bandwidth, it is unclear how the existing scheme can fit into this plan.

[16] *See NPRM*, ¶53.

The Commission also should not adopt the suggested across-the-board power reduction because it would virtually eliminate the ability of ITFS licensees to efficiently and economically serve their educational receive sites, without any attendant benefits.[17] Indeed, an across-the-board power reduction would perpetuate the interleaved nature of the MMDS and ITFS bands that exists today, and would require parties to engage in time-consuming channel swaps to privately de-interleave the spectrum. Even then, band plans in neighboring markets could differ, leading to interference coordination issues. In short, an across-the-board power reduction would maintain many of the problems of the *status quo* and also would eliminate the educational mission of ITFS.

For the foregoing reasons, the Commission should adopt the spectrum rebanding plan described in the Coalition Plan.

B. The Commission Should Adopt Geographic Area Licensing For MMDS And ITFS Licenses.

The Commission tentatively concludes that holders of MMDS BTA authorizations "should be allowed to place transmitters anywhere within their service area without prior authorization so long as the operation complies with the applicable service rules and that *[sic]* do not affect radiofrequency quiet zones or require environmental review or international coordination."[18] BellSouth strongly endorses the Commission's proposal to implement geographic area licensing for all incumbent MMDS and ITFS licensees.[19]

When MMDS was established in the early 1980s, the Commission envisioned a broadcast video service. It adopted rules that limited applicants to single transmit locations in specified

[17] *Id.*, ¶55.
[18] *Id.*, ¶83.
[19] *Id.*, ¶¶83-88.

urban areas, and defined serviceable areas by circular protected service areas surrounding the transmit site, without regard to the technical parameters and propagation characteristics specific to that location (such as terrain, foliage and climate conditions). Several years later, the Commission accepted applications for the remaining rural areas but restricted proposals to sites that were 50 miles or more from the urban transmit sites. The resulting landscape was a series of overlapping circles, with "white areas" where no protected service areas existed.

This licensing scheme created a myriad of problems. From a technical perspective, the actual MMDS and ITFS coverage areas were never equivalent to the circular protected service areas. In many cases, the coverage areas were larger, and in other cases, terrain obstructions created "dead spots" within the protected service area. From a regulatory perspective, the preparation and processing time associated with applications for the inevitable deluge of license modifications or booster stations proved to be prohibitively time-consuming and costly.

BellSouth's experience in the conversion from an analog to a digital video system in the Atlanta market illustrates these technical and regulatory challenges. Because of terrain and foliage, no single site in the Atlanta area could provide ubiquitous coverage throughout the 35-mile protected service area. BellSouth therefore designed its system with four high-power "booster" stations so that it could serve populated areas that would otherwise be unable to receive service. In order to accomplish this, BellSouth had to prepare extensive interference analyses and seek and obtain Commission approval for each channel group at each location. This process required conducting extensive engineering studies, negotiating numerous interference consents and adjacent-market coordination agreements, and preparing numerous applications, as well as months of Commission review.

This experience can be contrasted with the streamlined process that the Commission established for other services such as PCS, LMDS and WCS. Rather than licensing every site, the Commission utilizes geographic area licensing (such as BTAs, ETAs, MEAs, MSAs and RSAs) and limits signal strength at the borders to dramatically reduce the number of Commission approvals that would be required. Indeed, the Commission's adoption in 1996 of a BTA licensing scheme for MMDS moved the industry a step closer to the geographic area licensing that the Commission now envisions.

As discussed in the Coalition Plan, the "flaws inherent in the broadcast-style approach to regulating MDS and ITFS" would be magnified and would impair the industry's efforts to migrate to next generation broadband technology.[20] In the cellularized architecture that will become the norm in many advanced wireless systems, each site and each channel (or channel group) would require separate licensing. In a typical market, this could mean hundreds of applications. Moreover, as technology is deployed in the field, "dead spots" could emerge that could require further applications and processing to implement modest changes to antenna orientation, beam tilt, power levels and the like. To implement any technical change, under the current interleaved band plan and technical rules, numerous interference consents would need to be obtained, affording recalcitrant licensees the opportunity to unnecessarily stymie other licensees' efforts to improve service.

In combination with the adoption of the band plan proposed by the Coalition, establishing geographic area licensing is the most important change the FCC can make for MMDS and ITFS licensees and the consumers using their services. Licensing and service would be implemented more rapidly, enabling MMDS and ITFS licensees to better compete and meet the demands of

[20] *See* Initial Coalition Proposal, p. 7.

the marketplace. Licensees in nearby markets would no longer be able to withhold or delay providing interference consents, adding greater certainty to the timing of new service offerings. As recipients of advanced services, consumers would be the ultimate beneficiaries – whether in areas where they currently have a choice in broadband services or in areas where MMDS/ITFS licensees could introduce new advanced services. The Commission should promulgate rules for geographic area licensing.

C. The Commission Should Streamline Application Processing, Consolidate MMDS And ITFS Processing, And Use ULS Forms To Reduce Staff Processing Time, Harmonize Processing With Other Wireless Services And Help Expedite Service To The Public.

BellSouth supports the *NPRM*'s overall objective of adopting rules to streamline and consolidate processing for MMDS and ITFS applications and other filings. Alternatives to the current complex and cumbersome regulatory structure are imperative to expedite the introduction of service to the public and to reduce processing burdens for Commission staff and MMDS/ITFS licensees. To this end, BellSouth supports clarifying, consolidating and harmonizing the MMDS/ITFS procedural rules to eliminate outdated regulatory distinctions between these services and to eliminate rules that no longer serve valid regulatory purposes.[21]

If adopted in this proceeding, the proposed streamlining and consolidating would significantly reduce the uncertainty and delay associated with the Commission's processing of MMDS and ITFS filings pursuant to the current regulatory structure. Licensees are entitled to rely upon clear and consistent application guidelines, and the unwieldy nature of existing rules

[21] More specifically, unless otherwise indicated herein, BellSouth supports the proposed new rules regarding the following: consolidating procedural rules into Part 1; consolidating service-specific rules into Part 101; standardizing filing requirements; amendments to applications; assignments and transfers; partitioning and disaggregation; license renewal policies; special temporary authority; ownership information; regulatory status; fee issues; discontinuance, reduction and impairment of service; foreign ownership restrictions; performance requirements; application processing; and transition to new forms and processing rules. BellSouth also supports use of and conversion to (where necessary) NAD83 coordinate data and eliminating the reporting requirements of

has undermined the potential of MMDS/ITFS by perpetuating outmoded regulatory obstacles and delaying or discouraging investment in new technologies to maximize this potential. Such important changes cannot occur overnight; accordingly, BellSouth agrees with the Commission's determination that a reasonable transition period is necessary to assist licensees and applicants in becoming familiar with new processing guidelines and with the use of Universal Licensing System forms.

II. THE COMMISSION SHOULD PERMIT DSL PROVIDERS TO BE ELIGIBLE TO HOLD MMDS AND ITFS SPECTRUM RIGHTS.

A. The Communications Act And Commission Policies Preclude The Commission From Changing Its MMDS/ITFS Eligibility Rules.

In the *NPRM*, the Commission cites many of the benefits inherent in allowing DSL providers and cable operators to hold and acquire MMDS and ITFS spectrum. Nevertheless, it seeks comment "on whether allowing incumbent cable operators and/or DSL providers to be eligible to obtain MDS/ITFS licenses could have a negative impact in some broadband Internet markets."[22] The Commission's sole concern appears to be that incumbent DSL providers and cable operators might "attempt to protect their market power" by acquiring spectrum to preclude "current as well as future entry."[23]

Eligibility restrictions are disfavored as a matter of law and should be imposed only in circumstances that meet a very narrow statutory standard. The Commission recited this standard in the *NPRM*:

> Under our precedent, eligibility restrictions should be imposed *only* when (1) there is a *significant likelihood of substantial competitive harm in specific markets*, and, (2) only when eligibility restrictions are an *effective way to address such harm*. When

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Section 21.911 of the Commission's Rules. *See NPRM*, ¶150, ¶¶159-225.
[22] *Id.*, ¶126.
[23] *Id.*

> assessing the need to restrict the opportunity of any class of service provider to obtain spectrum for the provision of communications services, our overall goal has been to determine whether the restriction is *necessary* to ensure that consumers will receive communications services in a spectrum-efficient manner and at reasonable prices.[24]

Applying this statutory test leads to the unavoidable conclusion that the Commission cannot legally prohibit DSL providers from holding MMDS/ITFS spectrum.

Instead of restricting the activities of MMDS and ITFS licensees, the Commission instead should be implementing policies and adopting rules that encourage successful and well-financed companies, including incumbent DSL providers, to offer advanced services that can be efficiently combined with existing service offerings. As the Commission itself suggests, allowing those entities that have experience in the broadband business to hold MMDS/ITFS spectrum would help create a viable competitor for residential broadband service, and would fulfill the Commission's vision of increasing consumer choice for broadband services.[25] And, in areas where DSL and cable modem services do not – and cannot – be extended over existing landline facilities, MMDS and ITFS platforms offer incumbent providers the ability to extend service to new customers in a spectrally-efficient manner.[26] Rather than imposing restrictions to artificially manipulate a nascent product market and geographic markets that have not yet emerged, the Commission should "rely on competitive market forces to guide license assignment absent a compelling showing that regulatory intervention to exclude potential participants is necessary."[27]

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[24] *Id.*, ¶121, *citing* 47 U.S.C. §151 (emphases added).
[25] *Id.*, ¶125.
[26] *See id.*
[27] *Id.*, ¶121.

1. Allowing DSL Providers To Hold MMDS And ITFS Spectrum Will Enhance Service To The Public.

In the *NPRM*, the Commission identifies a substantial public interest benefit of allowing DSL providers to deliver broadband services using MMDS and ITFS spectrum. First, the Commission notes that where "expensive [DSL] plant upgrades are not feasible, DSL service providers may be able to use spectrum to offer broadband Internet services to customers who live in rural areas or beyond distance limitations from the central office."[28] Hence, MMDS and ITFS spectrum can be integrated with the wired DSL network to provide "fill-in" service as a first broadband offering to consumers that currently have no broadband service at all.

Second, as the Commission has consistently acknowledged, broadband access is critical to the economic future of rural Americans.[29] In its *Third Report* on broadband deployment, the Commission concluded that broadband services were being made available to consumers on a "reasonable and timely basis," but noted that:

> high population density has a strong positive correlation with the presence of high-speed subscribership and low population density has a strong negative correlation. Nearly all the most densely populated zip codes (well over 90 percent) have one or more high-speed subscribers, but fewer than 40 percent of the most sparsely populated zip codes have high-speed subscribers.[30]

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[28] *Id.*, ¶125. Using currently available technology, DSL is available only to customers whose lines are within 18,000 feet from a local exchange carrier's DSL network equipment.

[29] *See, e.g., Kevin J. Martin Remarks to the U.S. Department of Agriculture Rural Utilities Service's Public Meeting on Rural Broadband Access* (delivered June 27, 2002). In a recent report, the Department of Agriculture found that 43 percent of farm businesses use the Internet, a rate that exceeds the general population rate of use. Of these, 82 percent use the Internet to track commodity prices, 56 percent use the Internet to access specialized agriculture information, and 28 percent use the Internet to consult with crop advisors. *See* Jeff Hopkins and Mitch Morehart, "Farms, the Internet & E-Commerce: Adoption & Implications," *Agricultural Outlook*, published by the U.S. Department of Agriculture, November 2001.

[30] Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Third Report*, FCC 02-33, 25 CR 1123, 1135 (2002).

More recently, the Commission released summary information estimating that as of December 2002, 16 percent of occupied housing units had access to a high-speed data service and 88 percent of the nation's zip codes were served by at least one high-speed data provider.[31]

The results in rural counties derive from the inherent limitations on existing fixed-line DSL and cable networks. Although their voice lines extend indefinitely, at present the ability of DSL providers to offer high-speed service is technologically limited. As a result, BellSouth can offer its FastAccess™ DSL broadband service to some, but not all, of its telephone customers. State-of-the-art two-way wireless technology implemented over MMDS and ITFS spectrum can overcome many of these technological limitations in rural areas. DSL providers may be best positioned to offer wireless broadband service rapidly and efficiently in those rural areas where distance limitations otherwise foreclose such opportunities.[32]

In those rural areas where cable operators provide broadband service and DSL providers cannot, allowing DSL providers to utilize MMDS and ITFS spectrum serves another important public interest objective: competition. Except in those areas where other technologies might be available, these telephone customers have only the Hobson's Choice of receiving service from one provider – cable – or receiving no broadband service at all. DSL providers using MMDS and ITFS spectrum thus could more quickly offer meaningful competition to incumbent cable modem services, offering rural consumers – for the first time – a choice in broadband providers.

Based on the foregoing, the Commission cannot impose eligibility restrictions on DSL providers because there can be no "significant likelihood of substantial competitive harm"

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[31] *See* News Release, "*Federal Communications Commission Looks at Data Growth of Broadband Subscribership in Rural Areas*," released August 6, 2003.

[32] As discussed in Part IV, *infra*, the Commission should not require MMDS and ITFS licensees to serve rural markets, but should continue to allow marketplace demand to dictate the areas where services are best deployed and the types of services that would be offered.

required under Section 151 of the Communications Act. An MMDS/ITFS broadband service likely will be either the first service or the second service – a result that furthers the Commission's objectives of promoting the availability of advanced services to all Americans and the development of alternative facilities-based broadband providers.[33]

2. DSL Providers Are Not Dominant Broadband Providers And Do Not Have The Incentive To Warehouse Spectrum.

In the *NPRM*, the Commission cites a theoretical concern that cable and DSL operators might acquire MMDS and ITFS spectrum in an "attempt to protect their market power" and preclude "current as well as future entry."[34] In residential broadband markets, because DSL providers are not dominant, they thus do not have the incentive to acquire MMDS and ITFS spectrum for anticompetitive purposes.

As the Commission notes, DSL providers serve approximately one third of the residential broadband market, with the vast majority of other users subscribing to cable modem service.[35] The Commission cites several sources, including data it has collected in connection with issued reports, that estimate DSL subscribership at between 29 and 36 percent. Clearly, the current limited availability of DSL infrastructure is a factor in the dominance of cable in the fixed broadband market. To meet this competition from cable, DSL providers have every incentive to use, not warehouse, their MMDS/ITFS spectrum to extend broadband service beyond the geographical limitations of their existing DSL networks. Further, to the extent MMDS/ITFS spectrum can be used for portable and other advanced services, DSL providers will be able to respond to consumer demands for these services.

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[33] *See NPRM*, ¶¶33-35.
[34] *Id.*, ¶125.
[35] *Id.*, ¶123-124.

In adopting rules for the 39 GHz Service, the Commission considered whether it should prohibit local exchange carriers ("LECs") from holding 39 GHz licenses. The Commission recited, at some length, the numerous potential competitors and the lack of any incentive – and ability – of LECs to acquire 39 GHz spectrum for anticompetitive purposes. The Commission stated that:

> even presuming that 39 GHz licenses will enable effective provision of services that can compete with local exchange service, such as wireless local loop, incumbent LECs should have little or no incentive to acquire those licenses with the anticompetitive intent of foreclosing entry by other firms and preserving market power. *An incumbent strategy of preserving expected future profits by buying 39 GHz licenses cannot succeed because there are numerous other sources of actual and potential competition.* As explained above, there are many non-LEC license holders in the 39 GHz band currently, and these licensees will be able to provide services that compete with wireline local exchange. *In addition, our overall 36-51 GHz band plan contemplates making available considerable additional spectrum, including substantial unencumbered spectrum, for flexible terrestrial use at frequencies close to those covered by this Order.* These future licenses should enable provision of whatever competitive services can be provided with the 39 GHz licenses. Further, entry by other wireless licensees is possible as well, such as CMRS firms now authorized to provide fixed services.[36]

The marketplace for 39 GHz services that the Commission contemplated at the time the *39 GHz Order* was adopted bears a striking resemblance to the marketplace that is envisioned for future MMDS and ITFS services – competition with incumbent service providers, opportunities for facilities-based competition within the band, and future entry by other wireless licensees.

To quote from the *39 GHz Order*, "given all these competitive possibilities, it is implausible that incumbent LECs would pursue a strategy of buying 39 GHz licenses in the hope of foreclosing or delaying competition, and implausible that they would succeed if that strategy

[36] *See* Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, Report and*

were attempted."[37] The circumstances are no different with respect to DSL providers, who do not even possess market power in the broadband market. Far from having any incentive to acquire MMDS and ITFS spectrum to protect market power and foreclose market entry, DSL providers will have every incentive to use the spectrum to gain market share in the residential broadband market, and to offer new competitive services. In either case, consumers are the winners, gaining the benefits of increased competition – more choices in providers, better service quality and innovative services.

3. The Commission Should Not Restrict Eligibility Where The Marketplace Has Not Evolved And The Competitive Benefits And Harms Thus Cannot Be Assessed.

As stated above, eligibility restrictions may be imposed only where "there is a significant likelihood of substantial competitive harm in specific markets."[38] By definition, the Commission must analyze specific markets – both product and geographic – before it can determine whether there can be substantial harm, and whether (as the second prong of the standard states) eligibility restrictions are the only means to level the playing field. As the Commission recognizes, "there must be an examination of market concentration in addition to other relevant market facts and circumstances."[39] In asking for information on market share, the Commission requests commenters to "define the relevant geographic and product markets from which the market share information is derived."[40]

While efforts to obtain this information are well-intentioned, there can be no evidence whatsoever that would suggest that DSL providers as a class should be prohibited from holding

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Order and Second Notice of Proposed Rule Making, 10 CR 353,367 (1998) ("*39 GHz Order*") (emphases added).
[37] *Id*.
[38] *NPRM*, ¶121.
[39] *Id.*
[40] *Id.*, ¶126.

MMDS and ITFS spectrum. At the present time, there is no product market or geographic market for the rebanded MMDS and ITFS spectrum, only a nascent marketplace with unproven technology, unknown geographic and product markets and untested business cases. The MMDS and ITFS spectrum may be used for a variety of services – fixed and portable – in a variety of markets – urban or rural, residential or commercial – and those uses and markets may evolve and change over time. For instance, in "fill-in" areas where DSL services cannot be provided, MMDS/ITFS operators may choose to provide fixed broadband services. In areas where both cable modem and DSL services compete, MMDS/ITFS operators may choose to serve specialized markets. As these markets evolve and MMDS/ITFS becomes commercially successful, operators may add other services. The point of these examples is that, in any given market, the type and range of services cannot now be predicted.

Moreover, preserving eligibility for DSL providers would be consistent with precedent. In adopting rules for other spectrum bands where the product market did not exist and could only be predicted, the Commission found that imposing artificial eligibility restrictions failed the Section 151 statutory test. As examples, the Commission did not foreclose any specific class of service providers from holding licenses in the WCS[41] and 39 GHz services.[42] In addition, MMDS and ITFS data services may compete with Wi-Fi and other technologies operating in unlicensed bands, and satellite services also could offer competition at some point. These services have no eligibility restrictions. Imposing eligibility restrictions thus would evince unsupported and disparate treatment of MMDS and ITFS licensees as a class, creating burdens their competitors do not suffer.

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[41] *See* Section 27.12.
[42] *See* Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0

Restricting DSL providers from holding MMDS and ITFS spectrum would constitute an outright prohibition on the ability of one class of potential providers to enter the marketplace, without regard to the types of services that would be offered, the places where those services would be available to consumers and the characteristics of the specific markets. The Commission must, consistent with statute, precedent and logic, let market forces make these determinations before considering the likelihood of substantial harm and, only if such harm exists in the future in a given situation, consider whether eligibility restrictions would be the appropriate remedy.

4. DSL Providers Have Resources And Expertise To Rapidly And Efficiently Construct And Operate Advanced Wireless Systems, And Thus Should Be Eligible To Hold MMDS And ITFS Spectrum Rights.

The Commission's rules should permit DSL providers to hold MMDS and ITFS spectrum, in part because of the resources and experience they bring to the advanced services market. BellSouth is a successful DSL provider in its local exchange telephone areas and holds many MMDS and ITFS spectrum rights. Restricting DSL providers from holding MMDS and ITFS spectrum would adversely affect BellSouth's ability to continue to hold spectrum, invest in service offerings, and offer competitive alternatives to dominant cable modem service. It also would deprive BellSouth's customers from receiving advanced wireless services from the MMDS/ITFS platform.

Preserving eligibility for experienced wireline carriers like BellSouth is consistent with the Commission's reasoning in establishing rules for eligibility in the cellular industry. In modifying those rules in 1981, the Commission was faced with the question of whether to prohibit AT&T from holding cellular licenses. The Commission correctly determined that "it is

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GHz Bands, *Memorandum Opinion and Order*, 14 FCC Rcd 12428, ¶21 (1997).

very much in the public interest to seek participation from wireline carriers, and, in particular, AT&T which has demonstrated that it possesses the resources and expertise necessary to establish expeditiously cellular systems with nationwide capability."[43] BellSouth and other DSL providers likewise possess substantial financial resources, technical expertise and experience in delivering services to consumers expeditiously, and these companies should not be denied the opportunity to use their spectrum to integrate advanced wireless services with their existing DSL network.

5. Preventing DSL Providers From Holding MMDS And ITFS Spectrum Rights Would Be Contrary To The Commission's Policies.

In addition to promoting the use of MMDS and ITFS spectrum as a means to serve unserved and underserved markets, allowing DSL providers to hold such spectrum would promote other important Commission policies. First, open entry would recognize that, under flexible use concepts, licensees of the MMDS/ITFS spectrum may offer services other than fixed broadband, and would encourage proven innovators to develop new, spectrally efficient technologies and offer new services in competition with fixed and portable operators.

Second, open eligibility rules would facilitate development of secondary markets, a policy that the Commission has embraced. Recently, in WT Docket No. 00-230, the Commission adopted rules and policies that:

> are a landmark step in the Commission's evolution toward greater reliance on the marketplace to expand the scope of available wireless services and devices. These policies will lead to more efficient and dynamic use of the important spectrum resource to the ultimate benefit of consumers throughout the country. Facilitating the development of these secondary markets enhances and complements several of the Commission's major policy

[43] An Inquiry into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems, 49 RR2d 809, 818 (1981).

> initiatives and public interest objectives, including efforts to encourage the development of broadband services for all Americans, promote increased facilities-based competition among service providers, enhance economic opportunities and access for the provision of communications services by small businesses, and enable development of additional and innovative services in rural areas.[44]

As discussed above, DSL providers can help make these policy objectives a reality by introducing advanced services to areas where wired DSL and cable modem services are not available and providing facilities-based competition and competitive choice in areas where service is available.[45] Allowing DSL providers to continue to hold and acquire MMDS and ITFS spectrum thus enables the public interest benefits of secondary markets to be realized.

B. Instead Of Imposing An *A Priori* Rule Prohibiting DSL Providers From Holding MMDS And ITFS Spectrum Rights, The Commission Should Review Market Concentration On A Case-By-Case Basis.

The discussion above demonstrates that there is no legal or factual basis to impose rules prohibiting DSL providers from holding MMDS and ITFS spectrum. The advanced wireless services market is still evolving, and it is therefore premature for the Commission to presumptively conclude that a DSL provider's ownership of MMDS and ITFS spectrum would create undue market concentration and thus foreclose DSL providers, as a class, from

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[44] News Release, "*FCC Adopts Spectrum Leasing Rules and Streamlined Processing for License Transfer and Assignment Applications, and Proposes Further Steps to Increase Access to Spectrum through Secondary Markets*," released May 15, 2003.

[45] Chairman Powell echoed these policy goals in a speech earlier this year at the Cellular Telecommunications and Internet Association annual conference when he stated:

> Introducing a third broadband pipe to the home as a competitor to cable and digital subscriber lines is among the FCC's highest priorities – and there is no better candidate than spectrum-based services. Though wireless broadband is available in some markets, this potential pipe now merely trickles. My goal is to foster a regulatory environment in which this trickle can become a rushing torrent, raging over and through obstacles to provide vital competition and reach unserved homes and communities.

Michael Powell, "FCC Wireless Spadework in '02 to Bear Fruit in '03," *RCR Wireless News*, March 17, 2003.

participating. Indeed, no record has been established to determine, as required by Section 151 of the Communications Act, whether there is a significant likelihood of substantial competitive harm in specific markets and, if so, whether eligibility restrictions are an effective way to address such harm. Thus, instead of imposing *a priori* restrictions to remedy a harm that may never develop in a given situation, the Commission should review market concentration on a case-by-case basis under its public interest standard.

The Commission's elimination of CMRS spectrum caps is instructive in leading to this conclusion. In 1994, the Commission adopted rules limiting the amount of spectrum a CMRS licensee could own.[46] Subsequently, when the Commission found that there was "meaningful economic competition" in the CMRS industry, it sunset those limitations, holding that the "prophylactic" cap "was unnecessarily inflexible and could be preventing beneficial arrangements that promote efficiency without undermining competition."[47] Instead, the Commission indicated it would review transactions based on the particular circumstances of each case.

While the MMDS/ITFS spectrum allows different services to be offered in different geographic markets, there can be no doubt that there will be "meaningful . . . competition" in the markets that MMDS and ITFS licensees will serve. As the Commission found in the *Spectrum Cap Order*, an *a priori* eligibility restriction is inappropriate and unnecessary in these circumstances.

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[46] *See* Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Band, Amendment of Parts 2 and 90 of the Commission's rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and 935-940 Band Allotted to the Specialized Mobile Radio Pool, *Third Report and Order*, 9 FCC Rcd 7988 (1994).

[47] *NPRM*, ¶127. *See also* 2000 Biennial Regulatory Review: Spectrum Aggregation Limits for Commercial Mobile Radio Services, *Report and Order*, 16 FCC Rcd 22668, *recon. pending* (2001) ("*Spectrum Cap Order*").

III. THE COMMISSION SHOULD PROHIBIT UNLICENSED USE OF MMDS AND ITFS SPECTRUM.

In the *NPRM*, the Commission seeks comment on whether it should allow, for the first time, unlicensed operations in the 2500-2690 MHz band.[48] Assuming *arguendo* the Commission has the authority to permit unlicensed operations,[49] it should not authorize unlicensed operations on MMDS and ITFS spectrum. First, the current state of unlicensed technology does not permit responsible implementation of unlicensed devices in the MMDS/ITFS spectrum. Second, the uncertainty and novelty of unlicensed use would trouble investors, making them less likely to invest or lend money to MMDS/ITFS interests.

No record has been established that examines the extent to which unlicensed devices would cause harmful interference to licensed MMDS and ITFS operations.[50] Of particular interest would be an analysis of the cumulative and unsupervised effect of Part 15 devices on the MMDS/ITFS noise floor. The ability of radio devices to change locations creates unpredictability that must be reliably analyzed. It would be entirely premature for the Commission to authorize unlicensed uses without comprehensive and conclusive technical studies showing the absence of interference on licensed operations.[51]

Moreover, the risks of proceeding without an adequate record are too great. In order to be a successful competitor to existing broadband service providers, MMDS and ITFS licensees

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[48] *See NPRM*, ¶¶143-148.

[49] Questions have been raised about the Commission's statutory authority to permit unlicensed operations under Section 301 of the Communications Act. *See, e.g.*, Petition for Reconsideration of the American Radio Relay League, ET Docket No. 98-156 (filed February 13, 2002); Petition for Reconsideration of Cingular Wireless LLC, ET Docket No. 98-153 (filed May 22, 2003) *("Cingular Recon")*.

[50] *See* Comments of WCA in ET Docket No. 02-135, p. 10.

[51] Even where the Commission has received public input, substantial questions persist about the extent to which those devices would cause harmful interference. For instance, in the Ultra-Wideband proceeding, many commenters submitted technical evidence, including detailed studies and test results. The record in that proceeding shows no consensus, and the potential adverse impact on existing services remains uncertain. *See* Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems, *Memorandum Opinion and Order*, 18 FCC

will need to offer superior reliability, high-quality, always-on service. In its Working Paper 39 on unlicensed devices, the Commission itself discusses the problems inherent in an "underlay" environment:

> Interference that may be intolerable in one service might be perfectly acceptable in another. . . . For example, while interference that causes excessive break-ups or dropped calls would be considered unacceptable by the average cell phone user, a walkie-talkie user, who pays only a pittance for the device and pays no monthly fees, may be willing to accept that interference.[52]

The broadband services envisioned by MMDS and ITFS operators will, like cellular services, be offered for a monthly fee, and the inability to access the Internet or to make a phone call from a wireless device would undoubtedly lead consumers to question the quality and reliability of the technology and service and, assuming they are available, churn to fixed-line networks such as DSL or cable modem. This untenable result would undermine many of the benefits contemplated by the *NPRM*.

Too little is known, the risks are too great – and the Commission's ability to enforce its rules would provide too little help. Necessarily, interference cannot be mitigated or eliminated until after it happens – by which time service has been disrupted and the customer has become disenchanted. As underlay services proliferate, the problem only becomes more egregious, with numerous potential sources of debilitating interference – what some have called the "tragedy of the commons."[53] Enforcement of power and technical limitations cannot preemptively police interference, and any *post hoc* sanctions would have little value once service has been disrupted,

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Rcd 3857 (2003). For a summary of the record and testing in that proceeding, *see generally Cingular Recon*.

[52] Carter, Kenneth R., Ahmed Lahjouji and Neal McNeil, "*Unlicensed and Unshackled: A Joint OSP-OET White Paper on Unlicensed Devices and Their Regulatory Issues*," May 2003, p.46.

[53] *See* Spectrum Policy Task Force Report, ET Docket No. 02-135 (noting the limitations of a "commons" model, where no price mechanism exists for allocating scarce resources among competing users, leading to "interference and over-saturation").

even assuming that unlicensed interfering devices could be located and made to cease interfering operations.[54]

This ungovernable environment would create legitimate concerns for investors about the uncertainty created by spectrum underlay. As a result, much-needed investment will stay on the sidelines, effectively delaying – perhaps indefinitely – the substantial public policy benefits that would result from adopting the Coalition Plan.

Finally, the Commission has recently proposed to allocate additional spectrum in the 5 GHz band for unlicensed operations, reducing the need for an underlay in the 2500-2690 MHz band.[55] And the Commission has identified other candidate bands – the broadcast television band and the 3650-3700 MHz band – for potential use by unlicensed devices.[56] Thus, pursuing the notion of an underlay would impair the deployment of advanced services without any countervailing benefit of effectively addressing a demonstrable spectrum shortage or efficiency problem.

There is no record or reason why the Commission should allow unlicensed devices to operate in the MMDS and ITFS bands. It would strike at the core of the future utility of MMDS and ITFS spectrum and has the potential to undermine the fullest possible utilization of the spectrum for new and innovative services benefiting consumers. Accordingly, the Commission should expressly prohibit unlicensed operations in the 2500-2690 MHz band.

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[54] *See, e.g.*, Joint Comments of the Association for Maximum Service Television, Inc. and the National Association of Broadcasters, ET Docket No. 02-135 (filed January 27, 2003) (commenting on Spectrum Policy Task Force Report and urging accountability for interference from unlicensed devices).

[55] *See* In the Matter of Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band, *Notice of Proposed Rule Making*, ET Docket No. 03-122 (released June 4, 2003).

[56] *See* Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band, *Notice of Inquiry*, 17 FCC Rcd 25632 (2002).

IV. THE COMMISSION SHOULD RELAX ITS CONSTRUCTION AND SERVICE RULES.

Under Commission rules, holders of MMDS BTA authorizations currently have a five-year period within which to construct facilities.[57] Within this time frame, BTA authorization holders must provide signals that can reach at least two-thirds of the population of the BTA, not including the protected service areas of stations that existed prior to the 1996 auction. In the *NPRM*, the Commission seeks comment on whether: (a) the build-out period should be extended to coincide with the license term; and (b) the service requirements should be changed.[58] The Commission should extend the build-out period to the end of the initial MMDS BTA authorization term, and afford licensees a renewal expectancy upon a demonstration that they provided "substantial service" during the license term.

A. The MMDS BTA Build-Out Deadline Should Be Extended To The End Of The Term Of The BTA Authorization.

When the BTA rules were first adopted for MMDS, the Commission gave each MMDS BTA authorization holder a five-year build-out period.[59] Since that time – for every other auctioned service – the Commission has given BTA authorization holders the full license term of ten years to comply with the build-out requirements.[60] When the Commission extended the 218-219 MHz Service license term from five to ten years, it also extended the build-out period to be

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[57] *See* Section 21.930.
[58] *See NPRM,* ¶ 200.
[59] In the *NPRM*, the Commission suspended the build-out period (which had previously been extended to August 16, 2003) pending release of a Report and Order in this proceeding. *Id.*
[60] *See also* Sections 27.12-13 (noting that "WCS licensees must make a showing of "substantial service" in their license area within the prescribed license term [10 years] "); Sections 101.526-527 (requiring 24 GHz licensees to make a showing of "substantial service" during their 10-year license term); Section 101.1011 (requiring LMDS licensees to make a showing of "substantial service" in their license area within 10 years of being licensed); Section 101.1413 (noting renewal expectancy for MVDDS predicated on showing of the provision of "substantial service" at five years and 10 years into the license term); and Section 101.17 (stating that 39 GHz licenses must demonstrate "substantial service" at time of renewal).

coextensive with the license term.[61] There is no justification to treat holders of MMDS BTA authorizations differently than holders of geographic area licenses for other auctioned services.

Further, extension of the build-out period to coincide with the end of the license term would reflect the time needed for the rebanding plan to be implemented. A shorter time period may require licensees to construct twice, once with facilities to meet the earlier, artificially mandated deadline and again to provide actual advanced services following transition to a new system configuration.

Prior to its decision in the *218-219 MHz Flex Order*, the Commission had twice extended the build-out deadlines because of ongoing rule making proceedings. The Commission found that enforcement of the requirements "would be unreasonable and contrary to the public interest because the proposed rule changes to the 218-219 MHz Service were 'inextricably tied to [the licensees'] construction requirements and the mechanisms used to satisfy those benchmarks.'"[62]

Precisely the same circumstances are present here. The Commission is considering sweeping changes to the MMDS and ITFS service rules, technical rules and procedural rules. As discussed in the Coalition Plan, incumbent MMDS/ITFS operators have curtailed investing in further developing and expanding service in light of the challenging business environment and the impending adoption of new rules. If adopted as proposed in the Coalition Plan, the new rules could, in many cases, cause operators to reconfigure their system designs to better serve the public. As such, the proposed changes to the service, technical and procedural rules are "inextricably tied" to construction requirements and related mechanisms. In sum, BellSouth

[61] *See* Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, 17 CR 222 (1999) ("*218-219 MHz Flex Order*").
[62] *Id.*, p. 235, *quoting Order*, 12 FCC Rcd 3181, 3184 (1997) and *Order*, 14 FCC Rcd 5190, 5194 (1999).

submits that extension of the MMDS BTA build-out period to the end of the authorization term is consistent with precedent and the public interest.

B. The Commission Should Replace Its Rigid Coverage Requirements With A "Substantial Service" Standard.

In addition to extending the build-out period, the Commission should adopt a "substantial service" standard to determine whether the holder of an MMDS BTA authorization is entitled to renewal of its authorization. Here again, the Commission has adopted this same policy for every other auctioned service that followed the MMDS auction. And, as was the case with the build-out deadline, the Commission has had occasion to consider and modify its rules in the 218-219 MHz Service to weigh the relative benefits of a "substantial service" standard and to adopt an appropriate definition.

In the *218-219 MHz Flex Order*, the Commission eliminated the initially-adopted three- and five-year construction benchmarks and replaced them with a "substantial service" standard, concluding that:

> We believe that a "substantial service" analysis would be the best method to encourage the construction of facilities in unserved markets. In the *218-219 MHz Flex NPRM*, we solicited comment on a definition for "substantial service," as well as "safe harbor" examples of substantial service showings.
> * * *
> Upon reviewing the record, we conclude that the public interest would be best served if we define "substantial service" as a "service that is sound, favorable, and substantially above a level of mediocre service which might minimally warrant renewal."[63]

The Commission also acknowledged, as it must here, that the types of service might differ from market to market. To address these market variances, and to ensure that licensees are not penalized for responding to consumer demand, the Commission in the *218-219 MHz Flex Order*

[63] *Id.*, p. 246 (footnotes omitted).

provided examples of "safe harbors" that would qualify under the "substantial service" standard. The Commission stated that:

> Additionally, to facilitate licensees in their efforts to comply with this standard, we will consider the following "safe harbor" examples in determining whether a 218-219 MHz Service licensee has provided substantial service: (a) a demonstration of coverage to twenty percent of the population or land area of the licensed service area; or (b) a demonstration of specialized or technologically sophisticated service that does not require a high level of coverage to be of benefit to customers; or (c) a demonstration of service to niche markets or a focus on serving populations outside of areas currently serviced by other licensees. We have taken this approach in the past with respect to other services. Furthermore, we believe that these examples are reasonable and will offer the flexibility licensees need to develop and provide service to various populations that are currently unserved. We recognize that this list of examples is not exhaustive. Hence, we will review the record of the licensee in its entirety and will assess each case individually at renewal.[64]

The service rules for MMDS BTA authorization holders must be similarly responsive to varying levels and types of service, all of which demonstrate service consistent with serving the public interest.[65]

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[64] *Id.*, pp. 246-247 (footnote omitted). The Commission cited to numerous proceedings in which it had adopted a similar definition of "substantial service" and "safe harbors." *See* Rulemaking To Amend Parts 1, 2, 21, and 25 of the Commission's Rules To Redesignate the 27.5-29.5 GHz Frequency Band, To Reallocate The 29.5-30.0 GHz Frequency Band, To Establish Rules And Policies for Local Multipoint Distribution Service and for Fixed Satellite Services; Petitions for Reconsideration of the Denial of Applications for Waiver of the Commission's Common Carrier Point-To-Point Microwave Radio Service Rules; Suite 12 Group Petition for Pioneer Preference, CC Docket No. 92-297, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking*, 12 FCC Rcd 12545, 12660 (1997), *affirmed*, *Melcher v. FCC*, 11 CR 475 (D.C. Cir., 1998); Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, *Report and Order*, 12 FCC Rcd 10785, 10844 (1997); Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool - Implementation of Section 309(j) of the Communications Act, GN Docket No. 93-252, *Third Order on Reconsideration*, 11 FCC Rcd 1170 (1995); Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool -- Implementation of Section 309(j) of the Communications Act -- Competitive Bidding and Implementation of Sections 3(n) and 322 of the Communications Act, GN Docket No. 93-252, *Second Report and Order and Second Further Notice of Proposed Rule Making*, FCC 95-159, 10 FCC Rcd 6884, 6887 (1995).

[65] In addition, as noted in the Coalition Plan, incumbent, non-BTA stations licensed to the same ultimate parent should be included in the consideration of "substantial service." In many cases, the high bidder at the MDS auction

Assuming the construction build-out deadline is extended to be coterminous with the license period, the "substantial service" showing should be made at renewal time. Thus, if the BTA authorization holder licensee demonstrates that it has provided substantial service at any time during the license term, then, in the absence of any other issues that may result in the failure by the Commission to renew a license, its BTA authorization should be renewed.

C. The Commission Should Not Impose Any Rural Service Requirements.

The Commission also seeks comment on whether it should use construction benchmarks to encourage licensees to serve rural areas.[66] Such a requirement would be antithetical to the Commission's market-based policies and is unnecessary to expand rural service. Licensees should be free to serve the geographic markets that make the most sense in responding to consumer demand; in many cases, this may include the provision of fixed broadband service to "greenfield" rural areas where wireline DSL and cable modem services are not available. Rather than imposing rural service obligations on MMDS and ITFS licensees, the Commission should instead, as it intends in this proceeding, create a regulatory environment that will promote competition, innovation and investment in wireless broadband services, and eliminate (not create) unnecessary regulatory burdens or mandates.

The Commission's own findings demonstrate that, absent rural service obligations, the supply of high-speed service in rural areas is rapidly expanding.[67] In its most recent report on high-speed subscribership, the Commission found that, from December 1999 to December 2002, the percentage of zip codes with one service provider increased from 60 percent to 88 percent,

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already held site-specific MDS licenses in the same market, and the BTA rights provided coverage to new areas. It would be illogical to penalize those holders of MDS BTA authorizations that have been providing service from the incumbent facilities.

[66] *See NPRM*, ¶198.

[67] *See* News Release, "*Federal Communications Commission Looks at Data Growth of Broadband Subscribership in*

the percentage of zip codes with at least four providers increased from ten percent to 39 percent, and the percentage of zip codes with at least seven providers increased from one percent to 17 percent.

Demand also has increased in the last three years. Within that time period, the percentage of occupied households subscribing to high-speed services increased from two percent to 16 percent, an eight-fold increase. Many rural states experienced the biggest leaps; for instance, in North Carolina, the state with the second largest rural population, the percentage increased from one percent to 17 percent. Other primarily rural states reported similar growth. Equally as dramatic, the number of high-speed lines connecting homes and businesses to the Internet increased from 2.8 million to nearly 20 million.

These large increases indicate that high-speed service and competition are rapidly being introduced in rural America, in the absence of rural service requirements. The statistics reflect the expansion of cable modem plant, the extension of DSL by LECs and rural telephone cooperatives, the proliferation of unlicensed Wi-Fi services and, in some cases, the provision of "first generation" MMDS and ITFS technology. The future holds similar promise. Networks will continue to expand, and new technologies are likely to emerge. As one example, WildBlue Communications is planning to launch satellite broadband service in 2004, with high-speed service to be available throughout the country.[68] Suffice it to say, an increasing supply of high-speed service is available throughout the United States as the marketplace continues to evolve.

Further, it would unfairly burden MMDS and ITFS licensees to require them to serve rural areas when no such obligations are placed on other broadband providers. In fact, some

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Rural Areas," released August 6, 2003.

[68] *See* Press Release, *"$156 Million Investment in WildBlue Closes, Led by Liberty Satellite, INTELSAT and NRTC*," released April 22, 2003, available at http://www.wildblue.com/ab/index.htm.

licensees may choose to provide portable or other advanced services that may not include broadband. Without any showing that the Commission is justified in singling out MMDS and ITFS licensees, the Commission should not impose service obligations that treat them, as a class, in a disparate manner and artificially manipulate market forces.

Conclusion

In light of the foregoing, BellSouth Corporation and BellSouth Wireless Cable, Inc. urge the Commission to take the following actions in this proceeding:

- Adopt the MMDS/ITFS spectrum rebanding plan proposed by the coalition of MMDS and ITFS interests;
- Implement geographic area licensing and streamline application procedures;
- Retain open eligibility rules to enable DSL providers to hold and acquire MMDS and ITFS spectrum rights;
- Maintain its prohibition on unlicensed use of MMDS and ITFS channels;
- Extend the MMDS BTA build-out period to coincide with the end of the BTA license term and adopt a "substantial service" standard with appropriate "safe harbors;" and
- Permit market forces to determine deployment of advanced wireless services to rural areas.

Respectfully submitted,

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