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

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In the Matter of	)	
	)	
Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use	)	IB Docket No. 98-172 RM-9005 RM-9118

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

REPLY COMMENTS OF BELLSOUTH

BellSouth Corporation ("BellSouth"), by its attorneys, hereby submits its reply to the comments filed in response to the *Notice of Proposed Rulemaking* ("*NPRM*") in this proceeding.[1]

SUMMARY

In its initial comments, BellSouth expressed strong support for the spectrum plan proposed in the comments filed by the Fixed Wireless Communications Coalition ("FWCC").[2] Although the FWCC plan represents a significant diminution in the amount of spectrum available to the fixed terrestrial wireless community, BellSouth believes it strikes an appropriate balance between the demonstrated needs of the terrestrial community and the speculative needs of emerging satellite services.[3] The comments submitted in response to the *NPRM* confirm the wisdom of the FWCC

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1 *Notice of Proposed Rulemaking*, FCC 98-235 (rel. Sept. 18, 1998), *summarized*, 63 Fed. Reg. 54100 (1998) ("*NPRM*"). The Commission subsequently issued an *Order* (DA 98-2231) on November 2, 1998 extending the pleading cycle.

2 *See* Comments of BellSouth at 10-11.

3 *See* Comments of FWCC at 13-16.

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plan. Licensees of terrestrial fixed services in the 17.7-19.7 GHz band have clearly established that, while adoption of FWCC's proposal will require significant sacrifices, it is an acceptable compromise. Unfortunately, that spirit of compromise is not present in the comments of the satellite industry -- comments which largely seek more spectrum for satellite services than is proposed in the *NPRM* without either demonstrating a need therefor or addressing the requirements of the fixed terrestrial community. Therefore, BellSouth reiterates its call for the Commission to adopt the FWCC proposal.

One aspect of the FWCC plan that is particularly important is the fact that it ensures that multichannel video programming distributors ("MVPDs") currently utilizing the entire 18.142-18.580 GHz band can continue to rely on the availability of this band for future operations. MVPDs have no other options in terms of alternative spectrum and thus cannot be demoted to secondary status in the 18.55 to 18.580 GHz portion as proposed by the *NPRM*. In this way, MVPDs will be able to continue providing competition to incumbent cable operators for the benefit of the public.

In addition, the Commission must reject proposals being advocated by Teledesic LLC. The Commission must make certain that, regardless of what reallocation plan is adopted, incumbents forced to migrate to other spectrum should be fully and fairly compensated for their costs.

I. ADOPTION OF THE FWCC PLAN IS SUPPORTED BY THE RECORD

Under the FWCC plan supported by BellSouth, satellite interests would have primary status in 680 MHz of spectrum at 18.58-19.26 and co-primary status in 440 MHz of spectrum at 19.26-19.70, for a total of 1120 MHz of spectrum.[4] The record developed in response to the *NPRM* establishes that while this approach barely preserves sufficient spectrum for terrestrial fixed services,

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[4] *Id.*

it affords ample spectrum for new satellite services to meet the projected demands of the marketplace.[5]

The record before the Commission also establishes that there is a substantial demand for terrestrial spectrum in the 18 GHz band. This should come as no surprise because in the *NPRM* the Commission stated that:

> There are tens of thousands of terrestrial fixed links currently licensed in the 17.7-19.7 GHz band. Terrestrial fixed service use of this band is expected to increase as a result of migration of users from the congested lower terrestrial fixed service bands to this band, and from the need for new systems to support the introduction of new services such as digital television broadcasting, Personal Communications Services, and other digital communications systems.[6]

That observation has been borne out by the comments filed in response to the *NPRM.* BellSouth demonstrated in its comments that it will continue to require 18 GHz spectrum for future point-to-point common carrier links to support CMRS offerings, and to expand its competitive wireless video services.[7] Other terrestrial fixed commenters established that a substantial demand exists for microwave links in the 18 GHz band to provide essential services for public safety

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[5] At the same time, adoption of the FWCC approach will avoid disruptions to existing frequency pairings, and minimize the need for relocations of terrestrial incumbents to other bands which are becoming increasingly congested as a result of other prior reallocations. *See* Comments of The Independent Cable & Telecommunications Association at 17-18 ("ICTA"); BellSouth at 10-11.

[6] *NPRM* at ¶8. *See also* Comments of Wireless Communications Association International at 4 ("WCA")(stating that "[t]he demand for microwave interconnection is just beginning to grow, as fixed wireless service providers are just starting to aggressively roll out their service offerings."); The Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association ("Section") at App. A p.2 (stating that the 18 GHz band will have to accommodate "a myriad of needs, including the growth of a competitive video distribution service, CARS relays, broadcast auxiliary and backbone and infrastructure links of . . . emerging communication services.").

[7] *See* Comments of BellSouth at 4-7.

agencies, railroad, weather radar, public utilities, the FBI, the FAA, 911 service, fire dispatch services, newsgathering services, data transmission, video distribution, and cellular and PCS operations.[8] Although no incumbent spectrum licensee is ever particularly enamored of the prospect of losing access to any spectrum, the terrestrial community's support for the FWCC plan in the 18 GHz band is indicative of its willingness to compromise in the interests of efficient and equitable spectrum distribution.[9]

Unfortunately, the satellite interests have not carefully scrutinized their own spectrum needs to form the basis for a compromise that provides sufficient spectrum for terrestrial users. To the contrary, the satellite community has called for the Commission to reallocate vast amounts of 18 GHz spectrum for satellite services well in excess of even the amount proposed in the *NPRM*. For example, certain GSO/FSS proponents have called for the Commission to allocate a full 1,000 MHz of spectrum to GSO/FSS alone, without regard to the needs of other satellite services.[10] Yet, only one of those satellite interests even attempted to justify its spectrum demand, and that showing

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[8] *See* Comments of SBC Communications, Inc. at 2; Association for Maximum Service Television, Inc. ("MSTV") at 2; AirTouch Communications, Inc. at 3-4; WinStar Communications, Inc. at 2-3; GTE Service Corporation ("GTE") at 4; FWCC at 6; RCN Telecom Services, Inc. ("RCN") at 2-3; ICTA at 2-3; Cellular Telecommunications Industry Association at 3; BP Communications Alaska, Inc. at 1-2; The Association of American Railroads ("AAR") at 3-4; The Boeing Company at 1-2.

[9] *See* Comments of MSTV at 4-5; WCA at 4-5; AAR at 9; ICTA at 17-18; GTE at 7-8. Other supporters of FWCC's plan include: Association of Public-Safety Communications Officials; UTC - The Telecommunications Association; National Association of Broadcasters; American Petroleum Institute; Norfolk-Southern Railroad; Union Pacific Railroad; Burlington-Northern Railroad; People's Choice TV; Wireless One Inc.; Harris Corporation — Farinon Division; Digital Microwave Corporation; Sierra Digital Communications; California Microwave, Microwave Data Systems; Tadiran Microwave Networks. *See* Comments of FWCC at App. A.

[10] *See* Comments of Hughes Electronics, Inc. ("Hughes") at 4-8; PanAmSat Corporation ("PanAmSat") at 2-5; GE American Communications Inc. at 4-5; DIRECTV Enterprises, Inc. at 13-14.

consisted of nothing more than gross generalities.[11] Moreover, to the limited extent that the satellite interests even addressed the needs of the terrestrial users, the solutions they proposed are unworkable.[12] The dichotomy could not be more striking – while the terrestrial users are prepared to make sacrifices in order to reach a compromise acceptable to all sides, the satellite proponents have moved in the opposite direction.

BellSouth certainly understands that the satellite industry would prefer to secure access to as much spectrum as possible, particularly where a large allocation will allow each of the satellite interests to secure enough spectrum without having to contend for it through the competitive bidding process. The Commission's objective, however, must be to allocate to the satellite services only as much spectrum as is necessary to meet consumer demand, regardless of how much spectrum each individual applicant may desire. Thus, if the Commission focuses on the extent of demonstrated consumer demand, rather than on the desires of the applicants, it will likely find that far less spectrum is required than the satellite industry seeks. If that means competitive bidding is necessary to select from among multiple applicants for limited satellite spectrum, so be it. An auction would avoid inefficient spectrum use by satellite companies, unwarranted spectrum congestion and unnecessary relocations of terrestrial operators.

In short, the record before the Commission provides no evidence of satellite demand that would justify the allocation of more spectrum for satellite services than is provided for under the FWCC plan. Given the substantiated spectrum needs of the terrestrial community and the predictions by analysts of reduced demand for satellite services, the Commission should not give

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11 *See* Comments of Hughes at 2-3.

12 *See* discussion *infra* at p. 7.

credence to the satellite industry's unsupported spectrum demands. Instead, the Commission should adopt the FWCC proposal. It represents the only viable band segmentation plan that accommodates the reasonable requirements of all affected entities.

II. THE 18.142 TO 18.580 GHZ BAND MUST BE PRESERVED FOR PRIMARY USE BY MULTICHANNEL VIDEO PROGRAMMING DISTRIBUTORS

Like other MVPDs, BellSouth utilizes the entire 18.142-18.580 GHz band to support its wireless cable service operations.[13] However, the Commission's proposal to reallocate the 18.3-18.55 GHz portion of this band to primary GSO/FSS operations and grandfather existing operations would make usage of this band impossible by MVPDs.[14] In contrast, the FWCC plan preserves the entire 18.142 to 18.580 GHz band for primary MVPD usage.

In response to the *NPRM*, BellSouth, the FWCC, RCN and ICTA all demonstrated that the entire 18.142-18.580 GHz band must be preserved for primary MVPD use: 440 MHz of contiguous spectrum is required to transmit the full complement of video channels necessary for MVPDs to succeed in the marketplace.[15] Furthermore, there is broad agreement that terrestrial operations in this band cannot co-exist with co-channel satellite operations due to substantial interference concerns.[16]

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[13] *See* Comments of BellSouth at 4-6.

[14] *NPRM* at ¶29. The *NPRM* also instituted a policy by which any application filed after the release date of the *NPRM* would be accorded secondary status. BellSouth strongly opposes this policy and is concurrently submitting separate comments in this docket in support of the Emergency Request filed by the Independent Cable & Telecommunications Association for Immediate Relief and the Petition for Interim Relief by the Fixed Point-to-Point Communications Section, Wireless Communications Division of the Telecommunications Industry Association.

[15] *See* Comments of BellSouth at 5-6; FWCC at 7; RCN at 5-9; ICTA at 6-10; ICTA Petition at 6-8. *See also* Comments of GTE at 8.

[16] *See, e.g.*, Comments of BellSouth at 9-10; Section at 11; ICTA at 5; Comsearch at 6; Teledesic at 3-4; AAR at 6; Winstar at 7.

Nevertheless, certain commenters have suggested that MVPD operations in the 18.3 to 18.55 GHz range should be relocated to other spectrum.[17] However, the need for 440 MHz of contiguous spectrum cannot be satisfied in other bands. There is no other suitable spectrum that is uncongested, properly channelized, equipment vendor supported, or that would not present coordination difficulties.[18] Some commenters also have suggested that the Commission's proposal be altered such that the non-ubiquitous GSO/FSS co-primary allocation in the 18.5 to 18.8 GHz band be switched with the ubiquitous GSO/FSS primary designation in the 18.3 to 18.5 GHz band.[19] While under this approach MVPDs would retain co-primary status in the 18.3 to 18.5 GHz portion, and would face somewhat fewer interference concerns, the 18.5 to 18.58 GHz band would still be lost to MVPDs under this alternative. Such a result is untenable.

The need for 440 MHz of contiguous spectrum and the lack of any alternative spectrum elsewhere require the preservation of the 18.142 to 18.580 GHz band for primary, terrestrial MVPD usage. The FWCC plan accomplishes this result and still satisfies the legitimate needs of all service providers with a compromise band allocation — a goal that the Commission and all affected parties should pursue.

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17 *See* Comments of KaStar Satellite Communications Corp. ("KaStar") at 9-10; PanAmSat at 3; Teledesic at 8.

18 *See* Comments of ICTA at 6-10.

19 See Comments of KaStar at 7-8; Teledesic at 7; Lockheed Martin Corporation at 5-6; Capitol Broadcasting Co., Inc. at 3-4.

III. THE COMMISSION SHOULD CONTINUE TO APPLY THE RELOCATION POLICIES ESTABLISHED IN ET DOCKET NO. 92-9

The record established in response to the *NPRM* demonstrates that the Commission should adopt its proposal to apply its *Emerging Technology* relocation procedures if incumbent terrestrial microwave licensees are required to relocate to accommodate satellite services.[20] Significantly, no party objected to extension of these procedures to the 18 GHz band.[21]

Although generally supporting use of the *Emerging Technology* relocation procedures, one party — Teledesic — urges the Commission to revise these procedures such that incumbent licensees would be entitled to recover only "the unamortized cost of the replaced equipment, plus 2% of these 'hard costs' to help cover engineering and installation costs."[22] This proposal should be rejected as inconsistent with the fundamental principles underlying the Commission's well-established relocation procedures.

In adopting and thereafter refining the *Emerging Technology* relocation procedures, the Commission carefully balanced the needs of incumbent licensees and new technology providers and

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[20] *NPRM* at ¶41. *See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, ET Docket No. 92-9, *First Report and Order and Third Notice of Proposed Rulemaking*, 7 F.C.C.R. 6886 (1992) (subsequent history omitted) (*"Emerging Technologies"*). This relocation policy was applied to MSS licensees. *See Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, *Memorandum Opinion and Order and Third Notice of Proposed Rule Making and Order*, FCC 98-309 (released Nov. 25, 1998) (affirming requirement that new MSS licensees bear the costs of relocating incumbent fixed service and broadcast auxiliary service licensees).

[21] *Emerging Technologies*, 7 F.C.C.R. at 6886, 6890-92; *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, *First Report and Order and Further Notice of Proposed Rule Making*, 12 F.C.C.R. 7388, 7396-407, 7414-21 (1997).

[22] Comments of Teledesic at 16.

has consistently concluded that incumbent licensees subject to relocation must be provided with comparable facilities at no cost.[23] Although not mentioned by Teledesic in its comments, the Commission specifically rejected proposals similar to Teledesic's that would have factored amortization of the cost of existing equipment into the relocation process:

> incumbents subject to involuntary relocation will have the entire relocation cost paid by the emerging technology service provider. They will not incur the cost of the relocation, and in fact will benefit to the degree that aging equipment using older technology may be replaced with new equipment using state-of-the art technology. . . . Because replacement equipment must be provided at no cost to existing licensees, *concerns for amortizing or recouping investment in existing equipment are misplaced.* Such replacement equipment will operate during the original amortization period that would have applied to the old equipment.[24]

Teledesic has presented no new evidence that would warrant upsetting the delicate balance reached by the Commission in adopting the *Emerging Technology* relocation procedures. To the contrary, adoption of Teledesic's proposal would work a financial hardship on licensees, who would be required to bear a portion of the cost of a forced relocation that solely benefits the satellite industry.

Teledesic also suggests that the Commission (i) eliminate the need to reimburse incumbent licensees for equipment replaced after the date of the release of the *NPRM*,[25] and (ii) reduce relocation obligations by 33% for each license renewal after the release date of the *NPRM*.[26] These proposals should be rejected. With respect to the first point, the Commission has already determined

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[23] 47 C.F.R. § 101.75. *See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies*, ET Docket No. 92-9, *Third Report and Memorandum Opinion and Order*, 8 F.C.C.R. 6589, 6591, 6592, 6595 (1993) (subsequent history omitted) (*"Third Report"*).

[24] *Third Report*, 8 F.C.C.R. at 6595 & n.18 (emphasis added)(last two sentences of quoted language appeared in footnote).

[25] Comments of Teledesic at 20.

[26] *Id.*

that, under the *Emerging Technology* relocation procedures, relocation and reimbursement obligations are not affected by "minor" changes — including the replacement of equipment — made by incumbent licensees.[27] With respect to Teledesic's second point, Teledesic has failed to demonstrate why a terrestrial licensee that is required to relocate in order to benefit the satellite industry should have to expend its own funds merely because, by happenstance, its license was renewed between the *NPRM* release date and satellite service provider's decision to relocate. Indeed, adoption of such a proposal would give satellite operators the incentive to delay relocation until after terrestrial renewal to shift costs to the terrestrial licensee.

CONCLUSION

. The FWCC plan received broad support and should be adopted by the Commission. This plan properly takes into account the spectrum needs of the terrestrial and satellite communities and presents a sound spectrum segmentation scheme. While the terrestrial fixed industry clearly demonstrated the need for the spectrum proposed by the FWCC for terrestrial use, those few in the satellite industry that requested more spectrum than provided for by the FWCC for FSS failed to provide any justification for these excessive requirements. The entire 18.142 to 18.580 GHz band utilized by the MVPD industry is preserved under the FWCC plan and must remain available on a primary basis for the provision of video distribution services. In addition, to the extent that existing

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[27] *Third Report*, 8 F.C.C.R. at 6611.

terrestrial operations will be required to relocate to other bands, the Commission should continue to apply its well-established microwave relocation policies.

Respectfully submitted,

BELLSOUTH CORPORATION

By: Jim O. Llewellyn /DC

William B. Barfield
Jim O. Llewellyn
1155 Peachtree Street, NE, Suite 1800
Atlanta, GA 30309-3610
(404) 249-4445

By: David G. Frolio /DC

David G. Frolio
1133 21st Street, NW, Suite 900
Washington, DC 20036
(202) 463-4182

Its Attorneys

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CERTIFICATE OF SERVICE

I, Deanna L. Susens, hereby certify that on this 21st day of December 1998, copies of the foregoing "Reply Comments of BellSouth" in IB Docket No. 98-172 were served by hand on the following:

Regina Keeney
Chief
International Bureau
Federal Communications Commission
2000 M Street, N.W., Suite 800
Washington, D.C. 20554

Thomas Sugrue
Acting Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Suite 5002
Washington, D.C. 20554

D'Wana R. Terry
Chief
Public Safety and Private Wireless Division
Federal Communications Bureau
2025 M Street, N.W., Suite 8010
Washington, D.C. 20554

Deanna L. Susens

Deanna L. Susens