

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

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  
WASHINGTON, D.C. 20554

**REPLY COMMENTS OF SBC COMMUNICATIONS, INC.**

**I. INTRODUCTION.**

SBC Communications, Inc. on behalf of its affiliates ("SBC")<sup>1</sup> hereby replies to selected comments filed in the above-captioned proceeding relating to the redesignation of the 17.7-19.7 GHz band, often referred to as the 18 GHz band.

**II. THE NEEDS OF FIXED SERVICE USERS ARE IMMEDIATE AND REAL.**

The proponents of the satellite services do an effective job in advocating for additional unshared spectrum. However, the Commission must not lose sight of the fact that there are no commercial satellite operations in the 18 GHz band now. The needs of the satellite services are speculative. Moreover, as BellSouth points out, recent news analysis

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<sup>1</sup> SBC Communications Inc. ("SBC") is the parent/holding company of various subsidiaries conducting business under federal licenses. These subsidiaries include Southwestern Bell Telephone Company ("SWBT"), Pacific Bell Telephone Company ("Pacific Bell"), Nevada Bell Telephone ("Nevada Bell"), and various wireless carriers including Southwestern Bell Mobile Systems, Inc. ("SBMS"), and Southwestern Bell Wireless Inc. ("SWBW") and Pacific Bell Mobile Services ("PBMS"). The abbreviation "SBC" shall be used herein to include each of these subsidiaries as appropriate in the context.

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questions the demand for mobile satellite service.<sup>2</sup> On the other hand, fixed service users are using the band commercially now and the projections for growth which depend on 18 GHz point-to-point links are real. For example, the number of wireless subscribers continues to expand rapidly. The Commission's Third Annual CMRS Competition Report acknowledges that "much of the mobile telephone market is still in its infancy..."<sup>3</sup> As SBC pointed out in its comments, 18 GHz provides important backhaul links for its cellular and PCS properties.<sup>4</sup> While in some cases the point-to-point links are the preferred method of transmission for economic reasons, in other cases point-to-point links are the only alternative available. This is true also for the wireline side of the business. For example, the Forest Service, the Bureau of Land Management and the U.S. Park Services may not permit running fiber through their property. Therefore point-to-point microwave links must be used. In addition, microwave provides critical redundancy in part of the networks. For example, the Federal Aviation Association and some hospitals specifically request that microwave links be available for alternate routing.

The continued redesignation of the spectrum to move FS users into fewer and fewer bands jeopardizes the future of services that the public uses now and will use increasingly in the future. This view is not unique to SBC. AT&T Wireless states that "[l]oss of this spectrum will seriously degrade AT&T's ability to expand its cellular and PCS

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<sup>2</sup> BellSouth, p. 2.

<sup>3</sup> Third Annual CMRS Competition Report, released June 11, p. 15.

<sup>4</sup> SBC, pp. 2-3.

networks.”<sup>5</sup> AirTouch notes that “[u]se of the 18 GHz band is expected to significantly increase as our network continues to evolve towards more closely spaced cell sites.”<sup>6</sup> The public interest is not served by placing the needs of new, speculative services ahead of existing and growing services. However, this is what the current FCC proposal does. It redesignates spectrum to favor satellite services to the detriment of fixed services.

**III. THE ALTERNATIVE PROPOSAL BY THE FIXED POINT-TO-POINT COMMUNICATIONS SECTION OF THE WIRELESS COMMUNICATIONS DIVISION OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION IS PREFERABLE TO THE COMMISSION’S PROPOSAL.**

The Fixed Point-to-Point Communications Section of the Wireless Communications Division of the Telecommunications Industry Association (“TIA Fixed Wireless”) has offered an alternative in its comments that is supported by the broad-based Fixed Wireless Coalition. The TIA Fixed Wireless proposal does not ignore satellite interests. It provides adequate spectrum for satellite services. At the same time, it better ensures room for growth of fixed services than the Commission’s proposal.

SBC will not repeat all elements of the plan here. TIA Fixed Wireless has thoroughly described its proposal in its comments. However, there are some key elements that are of particular interest to SBC. One, the TIA Fixed Wireless proposal preserves the existing 17.7-18.14 and 19.26-19.76 GHz paired primary allocations.<sup>7</sup> Two, it grandfathers incumbent licensees as primary in the paired 18.58-18.82 and 18.92-19.16 GHz FS allocation.<sup>8</sup> Three, it rechannelizes the 17.7-18.14 and 19.26-19.76 GHz paired FS primary

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<sup>5</sup> AT&T Wireless, p. 2.

<sup>6</sup> AirTouch, p. 4.

<sup>7</sup> TIA Fixed Wireless, p. 3.

<sup>8</sup> Id. at p. 4

allocation.<sup>9</sup> The rechannelization will accommodate growth of new systems in the band and any necessary relocation from grandfathered systems in the paired 18.58-18.82 and 18.92-19.16 GHz FS band. This last element is particularly important because as SBC noted in its Comments the properties of 18 GHz transmission with the smaller dishes and towers and propagation characteristics make 18 GHz particularly suitable for backhaul for GSM PCS. In addition, 18 GHz also works well for cellular and landline systems.<sup>10</sup> Consequently, any relocation plan that enables FS to remain in the 18 GHz band is highly desirable.

The TIA Fixed Wireless Proposal supports the co-primary sharing of FS and MSS/FL in the 19.26-19.7 GHz Band. SBC raised concerns about the feasibility of such sharing in its comments.<sup>11</sup> The TIA Fixed Wireless Proposal supports sharing contingent on three requirements:

- 1) MSS/FL sites be located in remote areas.
- 2) MSS/FL sites must include 360 degree integral shielding of at least 25 dB for protection from FS transmitters: and
- 3) MSS/FL must only coordinate the frequencies and arcs necessary.<sup>12</sup>

SBC strongly agrees that these requirements are necessary if sharing is to be possible. However, the term “remote areas” should be defined to ensure that the sites are truly remote and limited in number.

API recommends that each satellite operator be limited to 4 MSS/FL sites and that none of the four terminals be located any closer than 200 kilometers from the largest 50

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<sup>9</sup> Id.

<sup>10</sup> SBC, pp. 2-3.

<sup>11</sup> Id. at pp. 4-5.

<sup>12</sup> TIA Fixed Wireless, pp. 15-16.

metropolitan areas.<sup>13</sup> AirTouch notes that the 19.3-19.7 GHz band is the downlink portion of the MSS allocation. The uplink portion occurs at 29.1-29.5 GHz and MSS operations in at least the 29.1-29.25 GHz portion are limited to a total of 10 feeder link earth station complexes (eight by one MSS operator and two by the other MSS operator). AirTouch recommends that the same limits applied to the entire downlink.<sup>14</sup> SBC agrees that additional conditions along these lines should apply to the MSS/FL in order to mitigate the concerns about sharing that were expressed in SBC's comments.

**IV. GRANDFATHERED LICENSES SHOULD BE ALLOWED MINOR MODIFICATIONS.**

SBC agrees with comments highlighting the need for the grandfathered licenses to have the ability to make minor modifications without jeopardizing their primary status.<sup>15</sup> The Commission permitted minor modifications in its proceeding to clear the 2 GHz band for Emerging Technologies.<sup>16</sup> The same modifications should be permitted in the 18 GHz band.

The lack of the ability to make minor modifications would have a severe impact on FS licenses. For example, under the rules for the 2 GHz band, minor changes in antenna height and minor changes in station location are permitted without losing primary status. It is very common to do new surveys and find that information relating to antenna height and station location needs to be corrected because the new measurements indicate previous small errors. Under the FCC's proposal a filing to correct the data on the license

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<sup>13</sup> API, p. 10.

<sup>14</sup> AirTouch, p. 13.

<sup>15</sup> See e.g., AirTouch, p. 10.

<sup>16</sup> 47 CFR §101.81.

application would result in having the license reclassified as secondary, even though there was virtually no change in the station operation.

Without the ability to make these modifications some FS users will be secondary simply because the user corrected data on an application. In addition, the minor modifications are necessary to allow the FS users to have some minimum flexibility in station operation. For example, minor equipment changes are permitted under the rule for systems at 1850-1990 MHz, 2110-2150 MHz and 2160-2200 MHz.

The redesignation of the band will have serious effects on FS users. The Commission must mitigate these effects somewhat by following precedent and allowing the minor modifications that it has previously recognized to be made without loss of primary status.

V. **ANY RELOCATION MUST BE DONE IN A MANNER THAT PROVIDES THE LEAST DISRUPTION TO THE FS USER AND COMPARABLE FACILITIES AT NO COST.**

As SBC indicated in its Comments, it is opposed to the relocation of terrestrial FS from the 18 GHz band because of the lack of appropriate spectrum outside of the 18 GHz band.<sup>17</sup> As noted above, the proposal of the TIA Fixed Wireless addresses this issue directly because its spectrum allocation provides for future growth and relocation with the 18 GHz band.<sup>18</sup> However, SBC still remains concerned about relocation, particularly relocation outside of the 18 GHz band. If the Commission decides relocation outside of the band is

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<sup>17</sup> SBC, p. 7-8.

<sup>18</sup> TIA Fixed Wireless, p. 4.

necessary, SBC strongly urges the Commission to liberally waive such technical requirements as path length restrictions and minimum loading requirements.<sup>19</sup>

The satellite interests are anxious to relocate FS out of the 18 GHz band as quickly and cheaply as possible. Teledesic wants incumbent FS users subject to mandatory relocation at the option of any FSS provider beginning in 2001.<sup>20</sup> DIRECTV proposes that grandfathered terrestrial systems retain co-primary status through April 1, 2007.<sup>21</sup> Pegasus is willing to allow grandfathered facilities to remain in the band for 10 years after the effective date of the order.<sup>22</sup>

With respect to the costs of relocation, Teledesic recommended that the compensation obligation exist only until January 1, 2004, at which point all grandfathered systems would become secondary.<sup>23</sup> In addition, Teledesic recommended that the Commission require relocation payments to incumbents be based on unamortized cost of the replaced equipment, plus 2% of these costs to help cover engineering and installation costs.<sup>24</sup>

It is critical that any relocation be fair and consistent with Commission precedent. Teledesic points out that there were problems with the compensation rules in the Emerging Technologies proceeding which resulted in the Commission having to clarify its rules.<sup>25</sup> That is true but the point is that now the rules have been clarified. The relocation has

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<sup>19</sup> A liberal waiver policy was proposed in the Emerging Technologies Proceeding. Notice of Proposed Rulemaking, ET Docket No. 92-9, 7 FCC Rcd 1542, para. 27 (1992).

<sup>20</sup> Teledesic, p. 14.

<sup>21</sup> DIRECTV, p. 18

<sup>22</sup> Pegasus, p. 18.

<sup>23</sup> Teledesic, p. 14.

<sup>24</sup> Id. at p. 16.

<sup>25</sup> Id. at pp. 15-16.

been working. There is no need to depart from the established rule with a new rule that provides only the most minimal compensation to the incumbents.

Teledesic uses the new car example to support its position that paying only the unamortized cost is reasonable.<sup>26</sup> It notes that the new car can be expected to last longer and be substantially improved.<sup>27</sup> Likewise, the FS licensee is getting new equipment that should be better than the prior equipment and the licensee should not be harmed because it had to pay for part of it. Teledesic ignores the fact that this analogy only works when the new car buyer wants to buy the new car. The FS user is more in the position of the car owner whose car is totalled in an accident and is forced to replace the vehicle. The car owner usually gets a cash settlement that will not begin to pay for new car and he seldom feels adequately compensated. The FS user is not proactively buying new equipment. He is being forced to acquire new equipment. Consequently, it is entirely appropriate to apply Commission precedent and require payment by the relocater of all costs of relocation to a comparable facility.

With respect to the timing of any relocation, the timetable advocated by Teledesic is simply fast. Again, the Commission should adhere to its established precedent from the Emerging Technologies proceeding and permit the grandfathered facilities to retain primary status for ten years.<sup>28</sup>

## **VI. CONCLUSION**

Any redesignation of a band involves a delicate balance of competing interests. SBC strongly supports the alternative proposal put forth by TIA Fixed Wireless. It

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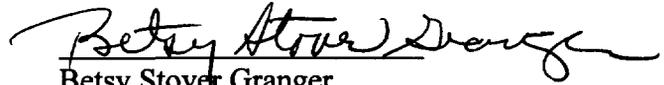
<sup>26</sup> Id. at p. 17.

<sup>27</sup> Id.

<sup>28</sup> 47 CFR §101.79(a).

allocates adequate spectrum for speculative satellite ventures while providing the existing FS users with spectrum that allows continued use of current paired links and provides room for growth and relocation within the 18 GHz band. Any redesignation must also allow grandfathered links to make minor modifications without losing primary status and must allow fair compensation for any relocation on a reasonable timetable. SBC respectfully requests that the Commission adopts a redesignation plan that contains all of the foregoing.

Respectfully submitted,  
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