

Before the
Federal Communications Commission
Washington D.C. 20554

In the Matter of

Interim Report on
Spectrum Study of the
2500-2690 MHz Band

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Docket No. ET00-232

To: The Commission

COMMENTS

1. The ITFS Spectrum Development Alliance (the “Alliance”), by its counsel, hereby submits its comments in the above referenced proceeding in response to the Interim Report of November 15, 2000.

Background

2. The Federal Communications Commission Interim Report, dated November 15, 2000, “Spectrum Study of the 2500-2690 MHz Band – The potential for Accommodating Third Generation Mobile Systems,” generate a number of concerns for the ITFS Spectrum Development Alliance (the Alliance).

3. The Alliance is a group of Instructional Television Fixed Service (ITFS) licensees operating telecommunication systems in almost 100 communities within the United States. Members of the Alliance include the Instructional Telecommunications Foundation, Inc. (ITF), the Hispanic Telecommunications and Information Network Inc., (HITN), the North American

Catholic Educational Programming Foundation Inc., (NACEPF), the Chicago Instructional Technology Foundation (CITF), the Denver Area Educational Telecommunications Consortium (DAETC), the Portland Regional Educational Telecommunications Corporation (PRETC), and the Twin Cities Schools' Telecommunications Group (TCSTG).

4. The Alliance is a non-profit organization that intends to provide ITFS licensees with the full complement of technical and business representation needed to convert successfully to digital two-way operation. Services provided by the Alliance include but are not limited to Instructional Television Fixed Service across the United States and Puerto Rico, providing formal classroom instruction in both public and private schools. Additionally, the Alliance services correctional facilities with educational and cultural programming, and delivers distance learning and videoconference capability to a wide variety of educational users throughout the nation. Its services also includes leasing arrangements with Multipoint Distribution Service (MDS) that provide commercial video programming services and the provision of high-speed, two-way access to the Internet

5. Our objective is to create new spectrum configurations and products that will reduce the many risks, and allow ITFS licensees to meet both educational and commercial needs far into the twenty-first century. The Alliance assists ITFS licensees with a wide range of technical matters, such as spectrum reconfiguration for two-way, interference consents, I-channel planning, modulation and other technology choices, and obtaining interference protection for two-way operations in a manner which allows flexible future use of ITFS channels.

6. The Alliance and other ITFS licensees possess a unique long-term perspective on technical issues. Additionally, common business objectives are connected intimately to the

technical decisions the Alliance makes as a whole. One of the Alliance's key functions is to liaison between ITFS licensees, Multichannel Multipoint Distribution Services (MMDS) licensees, and other stakeholders. The Alliance is committed to working with all stakeholders, including companies like Sprint and MCI/WorldCom.

7. Members of the Alliance delegate excess capacity leasing negotiations to the Alliance for a period of time, but receive all lease proceeds directly. This includes our commitment to equitably invest time to market considerations while retaining the ability to introduce advanced technology to maximize the efficiency of ITFS licensees resources.

Summary

8. The Alliance shares with the Commission the belief that sharing of the 2500-2690 MHz band between incumbent ITFS and MDS users and 3G systems would be highly impractical and would involve a host of extremely complex technical problems, especially in light of the varying uses now made of the spectrum by the incumbent services. Similarly, we share the Commission's conclusion that segmentation of this band to accommodate 3G systems would substantially disrupt existing services and is not a viable option.

9. Further, the Alliance believes that an objective review of worldwide spectrum allocation plans demonstrates that there is no clear preference for any particular band as a home for 3g services and certainly no presumption in favor of the 2.5 GHz band.

10. Additionally, a careful review of the transmission capacities to be achieved by 3G systems shows that in many regards they are so limited as to raise the concern that it is really only another voice band being sought by the industry.

Discussion

I. Sharing of the 2500-2690 MHz Band Between Incumbents and 3G Systems Is Not Feasible and Segmentation of the Band is Highly Impractical.

11. The Alliance strongly concurs with the tentative conclusion reached in the Interim Report that “sharing between 3G systems and ITFS/MDS operations is extremely problematic.”¹ As is clearly revealed by the Report, in all but the very less densely populated areas of the country the band is highly encumbered by incumbent users.

12. The Alliance also concurs with the Commission’s observation that the multiple uses already permitted by Commission Rules and employed by current licenses, ranging from analog point-to-point service to two-way digital configurations, impose severe restrictions on the ability to accommodate 3G systems in the same spectrum.

13. These considerations also demonstrate the difficulty of accommodating 3G services in this band through any segmentation plan. As the Commission analysis makes clear, the disruption to ITFS licensees and MDS systems that would occur under the segmentation plans studied is extremely substantial and would substantially reduce the capacity of those entities to serve their constituencies.

14. The Alliance believes that it is critical to approach any consideration of accommodating 3G systems in this band in the context of the recent history of the 2 Way Rulemaking engaged in by the Commission regarding this spectrum. The interim report is to be congratulated for the depth and clarity of its analysis in this regard. As noted therein, MDS systems can play a substantial role in offering “choice and competition in all aspects of telecommunications.”² The role of MDS can be particularly critical in bringing high-speed data services to rural areas,

¹Interim Report, November 15, 2000, Spectrum Study of the 2500-2690 MHz Band, at p. 53.

²Id., at p. 22.

which are now underserved, in that regard. The Alliance believes that it would be unfortunate in the extreme if that capability were compromised by loss of spectrum to 3G services.

15. It is important also to note in this context that the data throughput capacities envisioned for 3G systems are hardly comparable to what can be offered by MDS systems or even standard telephone modems. In rural settings, a mere 9.6-kilobit rate is proposed.³

II. ITFS Could Remain on a 2500-2650 MHz Band Redefined as Mobile to Accommodate 3G Systems.

16. While Commenter feels strongly that for all the reasons set forth in the Interim Report it would be ill advised to attempt to accommodate 3G systems in the 2500-2650 MHz band, it can also be noted that ITFS licensees could co-exist with 3G systems if the band were redefined as a mobile service.

17. In such a scenario, consideration might be given to whether ITFS might still be delivered to fixed receive sites over some the same frequencies which would be redefined to mobile. In a parallel arrangement to the current ITFS/MDS sharing, 3G providers would lease excess capacity from ITFS and provide equipment and resources to allow instructional programming to be provided to receive sites. Besides providing continuing support for ITFS, this also has the advantage of offering access to advanced telecommunications technologies to the educational community.

III. There is No Uniform Global Band Allocation System Favoring the 2500-2650 MHz Band.

18. As the Interim Report also makes clear, no single band or set of bands enjoys worldwide approval as the potential home for 3G services.⁴ Thus, despite whatever leanings

³Id. Appendix, at A-24.

⁴Id. Appendix, A30.

may be expressed by European governments for the use of the 2.5 GHz band for this purpose, most European administrations have recently signaled an intention to use 1.9 GHz (along with 1.7 GHz) as their new G3 band, rather than 2.5 GHz. Furthermore, NATO is currently using the 2.5 GHz band for defense communications throughout Europe.⁵ Thus the selection of 2.5 GHz in the United States will not allow for true global roaming with 2.5 GHz, 3G-only equipment. In light of this fact, and in light of the severe disruption that will be caused to the ITFS service, which accomplishes so much for educators in this country, Commenter submits that this does not constitute justification for the reallocation of this band.

19. **Wherefore**, the foregoing comments of the ITFS Spectrum Development Alliance duly considered, it is here respectfully stated that the record does not support reallocation of all or any of the 2.5 GHz band to 3G, that the record is incomplete as to the need for (another) 3G allocation or the suitability of the 1.9 GHz band for that purpose, and that the failure of NTIA to accept public comment on the sufficiency of the 1.9 GHz Report is procedurally deficient.

Respectfully submitted,

**ITFS SPECTRUM
DEVELOPMENT ALLIANCE**

Benjamin Perez, Its Attorney

⁵ The just released Department of Defense (“DOD”) report on its activities in the 1.9 GHz band, while a useful start, contained only partial information disclosed, on short notice. The report falls far short of what is needed for a full and final analysis. Full and comprehensive disclosure of all government use in both the 1.9 and 2.5 GHz bands should be made available to members of the effected spectrum users (industry committee members can be required to have the necessary level of security clearances in order to have access to classified portions of the information) before the Federal Communications Commissions makes its selection of 3G frequencies in a Notice of Proposed Rulemaking. Failure to provide all the relevant information to an industry wide task force (that include ITFS interest) for evaluation and comment will deny the Federal Communications Commission (“FCC”) a full record on which to comparatively select a new 3G band. This procedural shortcoming is compounded by NTIA’s decision not to accept private industry comments on DOD’s 1.9 GHz report.

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