

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

In the Matter of

Amendment of Part 2 of the Commission's) ET Docket No. 00-258
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)
)
Petition for Rulemaking of the Cellular) RM-9920
Telecommunications Industry Association)
Concerning Implementation of WRC-2000;)
Review of Spectrum and Regulatory)
Requirements for IMT-2000)

Amendment of the U.S. Table of Frequency) RM-9911
Allocations to Designate the 2500-2520/)
2670-2690 MHz Frequency Bands for the)
Mobile-Satellite Service)

To: The Commission

COMMENTS

San Jose State University submits these comments in response to the Notice of Proposed Rule Making and Order in the captioned proceeding, FCC 00-455 (released January 5, 2001) ("NPRM"). The NPRM explores the possibility of introducing new advanced mobile and fixed services (including Third Generation mobile services, or "3G") in various frequency bands, including the 2500-2690 MHz band currently allocated for and used by stations operating in the Instructional Television Fixed Service ("ITFS") and the Multichannel Multipoint Distribution Service ("MMDS").

San Jose State University urges strongly that the FCC's introduction of new cell phone services cannot and must not be accomplished at the expense of ITFS and MMDS allocations in the 2500-2690 MHz band. Preservation of these ITFS and MMDS allocations are necessary both for the continuation of pervasive and invaluable licensed uses by incumbent stations in these services and the expanding rollout of advanced wireless broadband services to schools, homes and businesses. San Jose State University believes that the Commission has identified, and can make available, other spectrum to satisfy demand for 3G mobile, without any incursion into the 2500-2690 MHz band.

San Jose State University uses ITFS to provide a wide range of distance education programs and courses for our students. We typically enroll over 1500 students per semester in our distance education courses, with programs in health professions (Nursing and Nutrition & Food Science) and education (Counselor Education and Teacher Credentialing) the largest and most frequent users of our ITFS operations. Using ITFS, these and other subjects are taught throughout the Bay Area and, most significantly, allow us to reach traditionally underserved and predominantly minority regions such as Hollister, Salinas, and other areas of Monterey County, California.

In addition to these direct educational programs offered by San Jose State University through ITFS, we are working closely with our corporate partner, Sprint, to transition our ITFS capabilities for two-way high-speed wireless broadband services throughout the Bay Area. Sprint has already introduced its wireless broadband service in Silicon Valley and the San Francisco Peninsula and is rapidly expanding its installations for users who seek an alternative to wired broadband providers. This service helps bridge the digital divide by enabling broadband access for users in the mountains and other Bay Area locations that are not served by the DSL and cable modem services.

The third major value of ITFS to San Jose State University is the additional educational programs and services we are able to provide due to the funding we receive through our excess capacity leasing partnership with Sprint. This continuing revenue stream has enabled us to develop and maintain satellite and videoconferencing facilities that are used for a variety of activities such as sending and receiving training programs nationally and internationally. One particularly significant use of these additional facilities is our MS in Transportation Management program, which is a statewide distance-education program offered to CalTrans employees through the (Norman Y.) Mineta Transportation Institute at San Jose State University. Our ITFS capabilities make these facilities, programs, and services feasible, as they otherwise would be unaffordable within the budget of San Jose State University and the California State University.

San Jose State University opposes the reallocation of the 2500--2690 MHz bands for 3G services on a number of grounds. First, ITFS and MMDS licensees have been using the band for many years to provide valuable educational services to students and teachers. There are more than 1,200 licensees across the country holding over 2000 licenses, serving K-12 schools, universities, community colleges, and governmental agencies and institutions. These licensees reach hundreds of thousands or millions of students and adult/workforce learners, principally through video programming and other related services. These services cannot be sacrificed for more sophisticated cell phones.

Recent developments in technology have made it possible for ITFS and MMDS stations to provide high-speed, two way wireless data transmission services, including for broadband Internet access. These technological innovations are particularly timely given the explosion in online education, which increasingly requires broadband access to rich-media content. Wireless broadband in the 2500-2690 MHz band utilizing ITFS and MMDS channels is fast enough to support a broad range of such content, including two-way real-time video, streaming video, and other bandwidth intensive applications necessary for effective distance learning. In addition, wireless broadband provides the capability for educational institutions to build wide area networks at a reasonable cost. Educators are just beginning to realize the enormous potential of this technology. A significant number of stations are already being used for these purposes, hundreds of ITFS and MMDS licensees have applied for licenses to provide two-way service as

of August, 2000, and many more are expected to apply when the opportunity arises again within the next several months.

In addition, ITFS educational licensees have become valuable "partners" of wireless communications companies through the practice of leasing capacity, or network sharing, which the FCC first allowed in 1983. The commercial counterpart of ITFS, MMDS has provided a variety of transmission services to communities around the country. Because MMDS licensees only have a limited amount of bandwidth, many ITFS licensees have joined with them to create shared networks -- essentially allowing ITFS systems to be deployed and operated at the expense of the commercial partner while generating additional funds for schools to use in developing their distance learning programs. The FCC has strongly encouraged this practice. However, if the FCC now takes channels away from these providers to make room for 3G services, the advantages of this public/private, educational/commercial collaboration will be lost.

Finally, the new ITFS/MMDS broadband wireless services are critical to bridging the digital divide -- the chasm between those in the United States that have access to broadband Internet offerings and those that do not. The benefits of high-speed Internet access do not reach most Americans. DSL and cable modem services are primarily serving new, affluent, suburban neighborhoods, leaving inner cities, rural areas, and various other insular communities behind. However, with the highly favorable signal transmission and reception range of stations operating in the 2500-2690 MHz band, ITFS/MMDS stations can reach rural areas, inner-city neighborhoods, Indian reservations, and other underserved communities that cable modems and DSL cannot or will not serve. Thus, only wireless broadband -- provided through ITFS and MMDS in the 2500-2690 MHz band -- has the power to bridge the digital divide.

If the FCC reallocates all or part of the ITFS/MMDS spectrum for 3G services, the capacity, usefulness, and value of the ITFS spectrum would be significantly diminished if not destroyed. Even if only part of the spectrum is taken, many educational institutions would lose their ITFS service altogether, while others would face new equipment costs, service disruption and cutbacks, lower quality service and signal interference. Moreover, the deployment of wireless broadband services through ITFS/MMDS shared networks would be stopped in its tracks, and for many communities, the promise of high-speed advanced services -- either at all or at any reasonable price -- would remain beyond reach.

For all these reasons, San Jose State University opposes any reallocation of channels in the 2500-2690 MHz band from ITFS and MMDS, and urges the FCC to move 3G mobile services into other available spectrum.

Respectfully submitted,

By: William D. Nance, Ph.D.

Title: Acting Associate Vice President, Academic Technology

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