

**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 ) IB Docket 98-172  
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 )

To: The Commission

**COMMENTS OF THE STATE OF CALIFORNIA**

The State of California, through its Department of General Services, Telecommunications Division, hereby submits the following comments to the Commission's Notice of Proposed Rulemaking ("NPRM"), FCC 98-235, released September 18, 1998, in the above-captioned proceeding regarding segmentation and reallocation of portions of the 18 GHz frequency band.

The State of California (State) operates a large point-to-point terrestrial microwave network for the primary purpose of supporting its public safety mobile communications networks. This microwave network, known as the Public Safety Microwave Network, consists of over 300 individual microwave paths or "hops" extending into all parts of the state and operating in every frequency band currently allocated for point-to-point service. The Public Safety Microwave Network interconnects state emergency services dispatch centers to the far-flung, mountain-top

base and mobile relay stations needed to communicate with police, fire, and EMS vehicles in the field. As such, the Public Safety Microwave Network is a vital link in providing the land-mobile communications used by the California Highway Patrol (one of the largest police agencies in the country), the California Department of Forestry and Fire Protection (the largest single fire agency in the country) and the Department of Corrections and the California Youth Authority (the largest correctional agencies in the country) as well as the Department of Transportation (CALTRANS), the Department of Parks and Recreation, the Department of Water Resources, the Department of Fish and Game, the Department of Justice, the Governor's Office of Emergency Services, and nearly 100 other state agencies. The connectivity provided by the Public Safety Microwave Network is critical to the successful operation of the VHF Lowband (30-50 MHz), VHF Highband (150-160 MHz), UHF (450-512 MHz), and 800-MHz (806-869 MHz) radio systems used by these agencies.

Thirty of the paths (60 stations) on the Public Safety Microwave Network currently operate on spectrum affected by this proceeding.

The State is particularly concerned with the manner in which this proceeding is being conducted. As noted in the first paragraph of the NPRM, the affected spectrum currently is allocated for shared use between terrestrial fixed service and Fixed Satellite Service (FSS). This proceeding proposes to carve-out a segment of the shared spectrum for exclusive use by FSS users while only suggesting how the non-FSS users might be able to use the remaining portion of the spectrum. In particular, the State notes that this proceeding proposes changes only to Part 25 of the Commission's Rules, yet those changes will have a dramatic effect upon the spectrum

assignments made under Part 101 and perhaps other parts of the Rules. It was only by happenstance that the State became aware of this proceeding in that it normally has no interest in that portion of the Commission's Rules governing the Satellite Services.

Since this proceeding proposes no changes to Part 101 of the Rules, nor is the State aware of any other proceeding under the auspices of the Wireless Bureau to propose modifications to Part 101, the State believes this proceeding will result in a record which is seriously deficient in soliciting and receiving input from all affected parties.

Over the past twenty years, the Commission has repeatedly acted to reallocate and thus reduce the amount of spectrum available for point-to-point services. Beginning in the early 1980's with reallocation of the 12 GHz band for Direct Broadcast Satellite (DBS) services, through the 1990's with reallocation of the 1.9 GHz and 2.1 GHz spectrum for PCS services, to this proposal to reallocate a portion of the 18 GHz band there has been a continual erosion of spectrum---erosion at a time when the demand for additional point-to-point services is rising, not declining. In particular, as PCS providers have built-out their systems, they have made greater use of the point-to-point services as a means of interconnecting the thousands of "cell-sites" they have constructed to provide PCS service on spectrum that had been allocated for point-to-point services. Thus, not only did reallocation of the 1.9-2.2 GHz spectrum remove some spectrum from use in point-to-point systems, it served to increase the demand for point-to-point services.

Since the above-captioned proceeding proposes no specific changes to Part 101 of the Rules, it is difficult for the State to assess the impact of the proposed reallocation on its existing services. However, the State notes that 5 of its currently licensed

stations operate in the 17.7-17.8 GHz portion of the band which the Commission proposes to allocate for Broadcast Satellite Services (BSS). Even though this proceeding suggests that such allocation can be made on a co-primary basis, the State believes the Commission is putting on blinders to the reality of spectrum use outside the hallowed halls of Commission headquarters. When John Q. Public discovers that his new satellite-TV receiver is getting interference from some “government” microwave station and complains to his local politician---who do you think is going to change-out their equipment, co-primary status or “grandfather clause” notwithstanding?

An additional 12 of the State’s existing microwave stations operate in the 17.8-18.3 GHz portion of the spectrum which this proceeding proposes to allocate for exclusive use by terrestrial services, but which also suggests the major portion of which would be designated for Cable Television Relay Service (CARS) AML technology, terrestrial fixed service video operators, and broadcast auxiliary services. Thus, very little of this spectrum is likely to remain for terrestrial fixed point-to-point services.

An additional 16 of the State’s existing microwave stations operate in the 18.8-19.3 GHz portion of the spectrum which this proceeding proposes to allocate for Non-Geostationary Orbit Fixed Satellite Service (NGSO/FSS) on an exclusive primary basis and further proposes to “blanket licensing” of stations throughout the U.S. Once again, “grandfather clause” notwithstanding, the terrestrial point-to-point user will be forced to relocate to relieve interference into a NGSO/FSS user who believes “blanket licensing” means he can put a station anywhere he desires.

Thus, of the 60 stations currently licensed to the State, 33 of them are likely to be displaced by this proceeding. The remainder fall within portions of the band which

will be shared with GSO/FS and MSS/FL users. Due to existing channel-pairing arrangements provided under Part 101 of the Rules, the remaining 27 stations also may require change-out to accommodate new channel-pairing schemes not discussed in this proceeding.

In conclusion, the State recommends the Commission return this proceeding to staff for further consideration, such consideration to include all affected parties, not just the initial petitioners. Consideration of reallocation of the band must consider how all of the existing users will be accommodated and propose specific plans, not the “could be’s” contained in this proceeding. Reallocation also must propose changes to all parts of the Commission Rules potentially affected (i.e. Part 101 and others, not just Part 25 as contained in this proceeding) so that commenters can properly evaluate the impact on their operations.

Respectfully submitted,

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