Docket 222

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Federal Communications Commission
Office of the Secretary

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

EX PARTE OR LATE FILED

92-91

Honorable Charles Luken
House of Representatives
1632 Longworth House Office Building
Washington, DC 20515-3501

Dear Congressman Luken:

Thank you for your letter concerning the Commission's proposals to allocate spectrum for emerging technologies. You express concern regarding proposals to reallocate frequencies at 2 GHz that would impact the existing users of these frequencies, including railroads, utility companies, other industries, and state and local governments.

On January 16, 1992, the Commission adopted a Notice of Proposed Rule Making (Notice) in ET Docket No. 92-9 that proposes allocating 220 MHz of spectrum at 2 GHz for use by new services and technologies. The Office of Engineering and Technology has developed a fact sheet which outlines this proposal. I have enclosed a copy for your information. In addition, because there has been some confusion about how this proposal would impact public safety agencies, I have enclosed a fact sheet which describes how those agencies would be affected by certain spectrum policies currently under consideration.

Briefly, under the Commission's proposal, state and local government licensees, including public safety agencies, would indefinitely continue their current operations on a primary basis. Other existing licensees would be permitted to continue their current operations on a primary basis for a period of time to be established - such as 10 or 15 years. Subsequently, they would be permitted to continue operating only on a secondary basis. Expansion and new microwave systems would be permitted on a primary basis only at higher frequencies. In conjunction with the Notice, the Commission released a staff study of existing use of this spectrum and identified other suitable frequencies available for this purpose. To further facilitate accommodation of the competing demands for this spectrum, the Commission also proposed to permit negotiation of financial arrangements between existing licensees and parties proposing new services. Such an approach would facilitate access to this spectrum for services employing emerging technologies.

These provisions are intended to prevent disruption to the communications of the existing licensees, yet still provide the spectrum needed by U.S. companies to develop new and innovative telecommunications products and services and bolster U.S.

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competitiveness in world telecommunications markets. An example of one such new proposed service is the personal communications service (PCS), which the Commission is addressing concurrently in GEN Docket No. 90-314.

The needs of the existing 2 GHz users are of importance to the Commission, and are being taken carefully into consideration. Please be assured that your concerns will be taken into account before a final determination is made in this matter. For that purpose, I am making your letter part of the record in the two dockets discussed above, ET Docket No. 92-9 and GEN Docket No. 90-314.

Sincerely,

Alfred C. Sikes
Chairman

Enclosures

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COMMITTEE ON
ENERGY AND COMMERCE

SELECT COMMITTEE ON
NARCOTICS ABUSE AND CONTROL

CONGRESSIONAL RURAL CAUCUS

OET

90-314

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Congress of the United States
House of Representatives
Washington, DC 20515-3504

January 29, 1992

Hon. Alfred Sikes
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Chairman Sikes:

We are writing to express our concern over the disruptions that would be caused if the FCC decides to create a "spectrum reserve" for "emerging technologies" from the 2 GHz band. Many industries and services in Ohio will suffer tremendous disruptions and monetary costs should the FCC mandate a spectrum move.

The immediate concern is over possible reallocation of the bands 1850-1990, 2130-2160, and 2180-2200 MHz, each of which is being considered for a new personal communications system. The utilities, railroads, other industries, and state and local governments use the proposed frequency bands for extensive microwave communication. They utilize these microwave systems because they are more reliable than those provided by common carriers. The industries' investments in the microwave systems operating in those bands are substantial. The cost for reaccommodating those present microwave systems in other frequency bands would be exorbitant, assuming that alternative frequencies in such other bands are available.

The cost of the disruption to these critical industries would be immeasurable. Our constituents could suffer temporary loss of energy, water service, or emergency response time. This should not be a cost that is invoked by the need to cater to interests which desire the spectrum be reallocated for the proposed personal communications system.

Noting the foregoing, and as the Commission plans spectrum allocations to accommodate new telecommunications concepts, we urge the Commission to exercise great care and prudence not to impose costly changes and disruptions to the on-going and future microwave systems depended upon by these critical industries and services. The Commission is urged to consider other alternatives so as to avoid adverse impact upon the microwave telecommunications that are so vital to basic U.S. industries.

Thank you for your consideration.

Yours truly,

Clarence Miller

MGO/cja

ACTIVITIES AFFECTING PUBLIC SAFETY SPECTRUM

Emerging Technology Band Proposal

- In January 1992, the FCC proposed to reallocate 220 MHz of the 2 GHz frequency band. The FCC proposed that this 220 MHz be used for new emerging technologies, such new services could include:
  - Personal Communications Services and Networks (PCS & PCN)
  - Low Earth Orbit (LEO) Satellite Services
  - Wireless Computer Networking
  - Digital Audio Broadcasting

- FCC proposal is consistent with international activitity looking at this frequency band for future advanced mobile services. Countries in Europe and Asia plan to use 2 GHz spectrum for new technologies, such as PCS.

- FCC proposal would encourage U.S. competitiveness and the domestic development of new services and technology by making available new spectrum for such uses.

- Public Safety Impact- Existing 2 GHz microwave spectrum is currently used by a wide variety of entities and businesses to provide point-to-point communications services. State and local government entities, including public safety, have significant operations in this band. State and local government licensees represent about 20% of the users of this spectrum. To ensure that these operations would not be harmed, the FCC proposed that:
  - All existing state and local government operations, including public safety, be exempted from any mandatory move to higher frequencies.
  - Such operations can countinue to operate indefinitely and would be protected from interference from any future new technology operations.

License Fees For Public Safety

- Public Safety Impact- None. Public safety licensees are exempted from all FCC processing fees (Omnibus Budget Reconcilation Act (1989), Section 1.1112(b) of the FCC Rules.

Congressionally Initiated Spectrum Bills

- Public Safety Impact- None. Spectrum bills [H.R. 531, S. 2904 (Dingell, Inouye)] would reallocate spectrum from Federal government use to non-Government use. While public safety licensees have raised concern with the bills, the bills do not affect public safety licensees.

FCC/OET
02/26/92

FCC PROPOSAL FOR EMERGING TECHNOLOGY BANDS AT 2 GHZ

PURPOSE: To present the FCC proposal to reallocate spectrum for emerging technologies.

BACKGROUND:

- o On January 16, 1992, the FCC proposed to reallocate 220 MHz of spectrum at 2 GHz from fixed microwave service to new emerging technologies.
  - Final rules will be addressed by FCC after consideration of comments that can be filed until May 21, 1992.
  - The spectrum is currently used to provide point-to-point communications for a variety of services, such as utilities, railroads, public service (including public safety), businesses, and cellular telephone.
  - Emerging technology services could include new mobile services and mobile-satellite services:
    - Personal Communications Services (PCS) and Networks (PCN)
    - Mobile-Satellite Services, including Low Earth Orbit (LEO) Satellite Systems
    - Wireless Computer Networks (Data PCS)
- o Growing demand from U.S. companies to develop new, innovative technologies and services has put great pressure on FCC for suitable spectrum:
  - Current requests at FCC seen for up to 400 MHz for new emerging technology.
  - Additional allocations of 800 MHz for expansion of existing services envisioned.
- o Other countries are allocating large blocks of spectrum around 2 GHz for new mobile services and emerging technologies in order to foster their domestic manufacturing.
  - Japan has allocated 100 MHz and is considering an additional 400 MHz.
  - U.K has allocated 174 MHz.
  - The European Community is considering allocating up to 320 MHz.
- o The 2 GHz band is the best band for the new mobile technologies and services.
  - 2 GHz is where state-of-the-art mobile communications are being developed internationally.
  - 2 GHz fixed microwave band is the only band that is available for development of new mobile services.
    - Lower bands are heavily used by services (such as broadcast TV) that can not be relocated to higher bands.
    - Higher bands are limited by current technology that will not allow for commercial development of electronics for mobile technologies.
- o The 2 GHz fixed microwave operations may relocate in any of over a half-dozen higher fixed microwave bands.
  - These bands provide sufficient capacity to reaccommodate existing 2 GHz operations.
  - Intermediate sites will generally not be required.
  - Systems of comparable or higher reliability can be designed in the higher bands

through common engineering practices.

- The cost of relocating existing 2 GHz operations does not present an economic barrier to relocation. (See proposal)

FCC PROPOSAL:

o Current 2 GHz microwave users would be permitted to negotiate during a transition period financial and other arrangements with new service providers to assist in the relocation to new frequencies. Marketplace negotiations would encourage a timely transfer of spectrum and could permit current users to modernize their equipment and move to other microwave spectrum at no financial cost to themselves. (Existing public service users, including public safety, would continue undisturbed indefinitely, but would be permitted to negotiate a transfer, if they choose.) FCC is considering three alternative transitions:

- Fixed Transition: One alternative would be to permit current microwave users to operate on a co-primary basis for a lengthy transitional time period during which the negotiations could occur; FCC proposed 10 or 15 years.
- Phased Transition: Another approach might be to adopt a phased allocation in which blocks of frequencies would be made available for new services at intervals (e.g., 50 MHz every five years).
- Unlimited Transition: An alternative would be to permit existing users to continue to operate on a co-primary basis indefinitely while permitting negotiations for the use of the spectrum.

o New emerging technology services would be permitted access to the 2 GHz bands only on the condition that they not interfere with current fixed microwave operations during the transition.

o FCC proposes to waive eligibility restrictions to permit easier relocation of existing 2 GHz users to higher fixed microwave bands.

o Expansion of existing microwave systems or introduction of new microwave systems at 2 GHz would be permitted only on the condition they not cause interference to new services; of course, new microwave systems or expansion of existing systems at higher microwave bands is encouraged without conditions.

o After the transition period all 2 GHz microwave operations, except public service (public safety) which is permitted to remain unconditionally, would be allowed to remain in the band on the condition that they protect new services. (This permits, for example, microwave systems to operate indefinitely in rural areas where we would not expect great demand for many of the new services.)

o FCC has also requested comment on the possibility of making available for relocation purposes government spectrum adjacent to the proposed 2 GHz band.