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EX PARTE OR LATE FILED

October 7, 1999

BY HAND

Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, S.W. - Suite TW-A325
Washington, D.C. 20554

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OCT 07 1999
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: WT Docket No. 96-86
WTB-2, National Coordination Committee
Written Ex Parte Communication

Dear Ms. Salas:

Transmitted herewith for inclusion in the public record of the above-referenced "permit but disclose" proceeding are two copies of a written *ex parte* letter that was delivered this day to Kathleen M. H. Wallman, Chair of the National Coordination Committee.

Please direct any questions concerning this filing to the undersigned.

Sincerely,



Ruth M. Milkman

cc: Michael J. Wilhelm (By Hand)
Designated Federal Officer
National Coordination Committee

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October 7, 1999

BY HAND

Kathleen M. H. Wallman, Chair
National Coordination Committee
445 12th Street, NW
Suite 321
Washington, DC 20004

RECEIVED
OCT 07 1999
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: Notice of Proposed Rulemaking; Service Rules
For 746-764 and 776-794 MHz Bands, and Revisions
To Part 27 of the Commission's Rules
WT Docket No. 99-168

Dear Ms. Wallman:

In an August 25, 1999 letter to Chairman Kennard on behalf of the National Coordination Committee (NCC), you urged the Commission to amend its "flexible use" proposal in the above-referenced proceeding to include specific parameters that adequately protect public safety communications from interference from commercial services operating in the 746-764 and 776-794 MHz bands. You observed that "strong, well defined interference guidelines" are essential to protect public safety facilities operating in adjacent bands given that these facilities are critical to the safety of life and property.

FreeSpace Communications (FreeSpace) fully agrees with your recommendations, and has submitted a proposal to the Commission that would provide maximum interference protection to public safety operations in the 764-776 and 794-806 MHz bands. FreeSpace has developed a new, innovative wireless communications system to provide consumers access to broadband voice and data services at very low power levels. FreeSpace has proposed that the Commission license eight 1 MHz channels for such innovative, low power uses in the 746-764 and 776-794 MHz bands. A major benefit of this proposal is that it would establish guard bands adjacent to the public safety spectrum to protect public safety radio operations fully against interference from adjacent channels.

We have attached to this letter the proposal FreeSpace has presented to the FCC. Under this proposal, as depicted on page 2 of the attachment, licensees operating on the channels immediately adjacent to the public safety band (*i.e.*, the channels operating at 763-764 MHz, 776-777 MHz, and 793-794 MHz) would be required to comply with a power spectral density limit of 4 mW/kHz. Licensees operating on a second-adjacent

channel to the public safety band (*i.e.*, the channels operating at 762-763 MHz, 777-778 MHz, and 792-793 MHz) would be required to comply with a power spectral density limit of 20 mW/kHz. Such low spectral density power limits would ensure that current *and* future public safety communications will be free from interference from operations in the adjacent commercial band. A power spectral density limit would provide more effective protection than a peak power limit because it would prevent concentration of transmit power in narrow bandwidth channels adjacent to public safety.

FreeSpace consequently believes that its proposal provides the clear, effective interference guidelines the NCC has recommended to ensure protection against interference to public safety operations. As the NCC examines any proposals in this proceeding, we ask that it consider FreeSpace's proposal as meeting its concerns.

FreeSpace would welcome the opportunity to meet with the Committee to discuss this proposal and to answer any questions you or any other members of the Committee may have. In addition, members of the Committee may wish to contact Dr. Arvin Shahani, a principal of FreeSpace, at (650) 354-3678 or by email at arvin@freespacecomm.com.

Sincerely,



Ruth M. Milkman
Counsel to FreeSpace Communications

cc: Michael J. Wilhelm
Designated Federal Office
National Coordination Committee

Enclosure

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FREESPACE COMMUNICATIONS

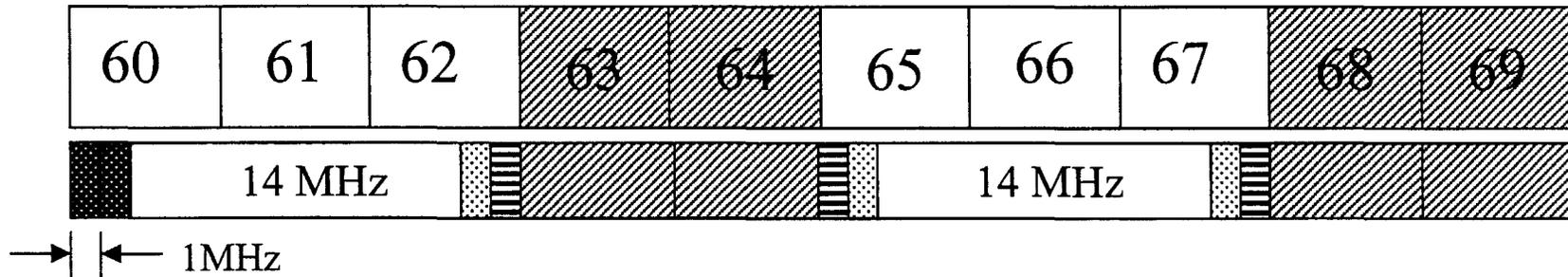
Ex Parte Presentation

October 4-5, 1999

Service Rules for 746-764/776-794 MHz Bands

WT Docket No. 99-168

FreeSpace Communications Channels 60-69 Proposal



License eight 1MHz, paired channels for innovative, low power uses that protect public safety band:

▨ 4mW/kHz ▩ 20mW/kHz ■ > 20mW/kHz

▨ Public Safety

License remaining 28MHz for higher powered mobile and fixed wireless services:

□ Two 14MHz bands for mobile & fixed wireless services

Public Interest Benefits

- Creates *guard bands* to provide maximum interference protection to public safety operations in 764-776/794-806 MHz band.
- Supports *new, innovative* uses of spectrum such as FreeSpace Communications' broadband wireless voice and data service.
- Extends wireless and internet services to *underserved communities*.

Protecting Public Safety

- *The Challenge:* FCC “must limit types and nature of non-broadcast commercial mobile radio operations on adjacent channels and/or provide a sufficient guard band within the commercial spectrum to prevent interference with public safety systems.” *APCO Comments at 3.*
- *The FreeSpace Solution:* Establish transmit power limits in guard bands adjacent to public safety spectrum that will provide maximum interference protection to current and future public safety operations.

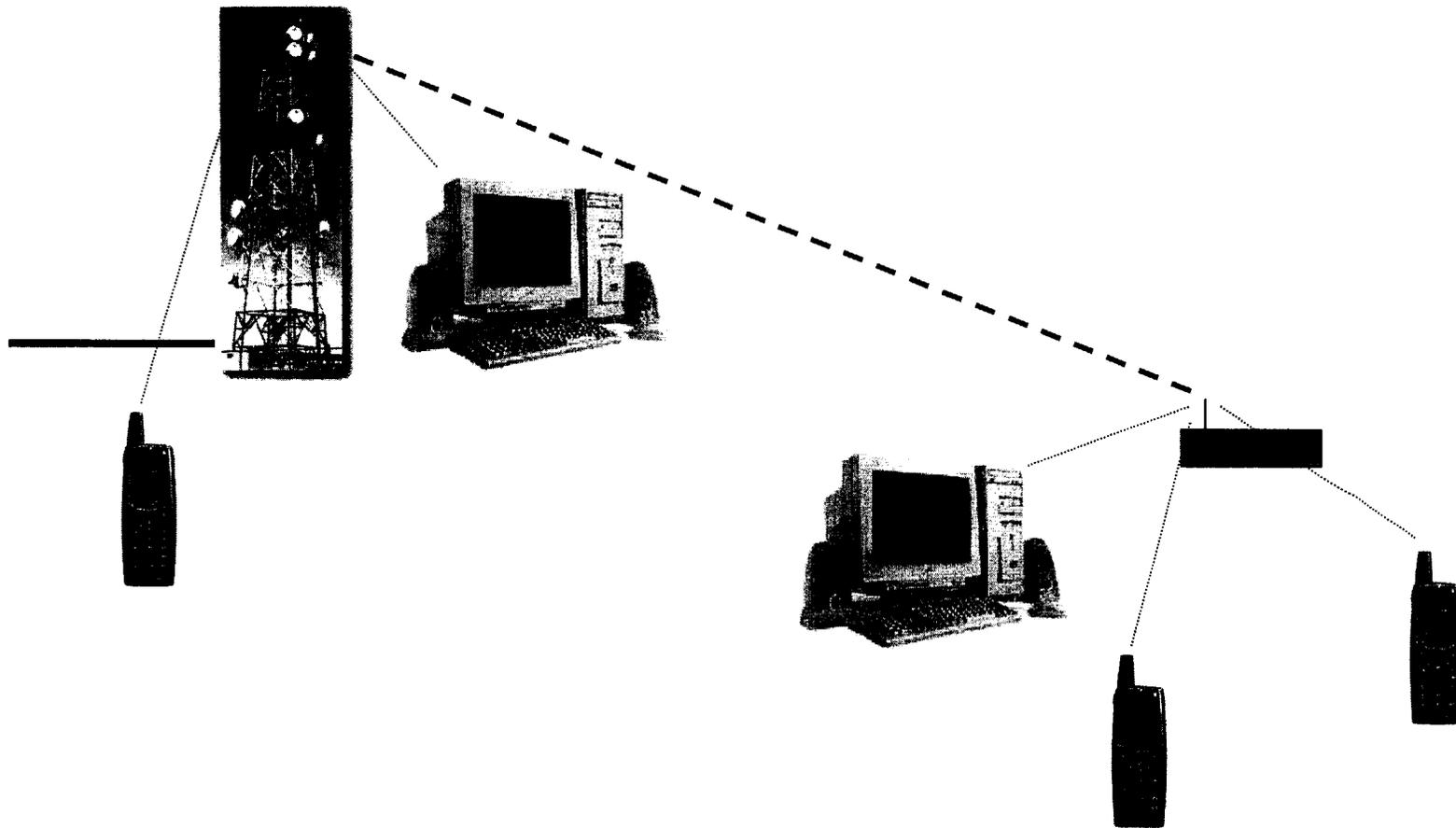
Use Power Spectral Density Limits to Control Interference

- Prevents concentration of transmit power in narrow bandwidth channels adjacent to public safety
- Allows wireless systems to be engineered for services rather than around channel bandwidths
 - Distance, transmit power, and channel bandwidth are interrelated
 - PSD limits allow transmit power to be coupled to channel bandwidth, causing distance to be independent of channel bandwidth

The FreeSpace System

- Offers wireless voice and data, including broadband wireless internet connection.
- Uses innovative technology that promotes efficient use of the spectrum.
- Technology involves significantly lower infrastructure, equipment and maintenance costs, which means less expensive wireless services for consumers.

Network Architecture



Bringing the Telecommunications Revolution to Underserved Communities

- *The Challenge:* Bring affordable telecommunications services to underserved areas, including tribal lands and rural areas.
- *Existing Obstacles:* High infrastructure costs, and high monthly fees for consumers.
- *The FreeSpace Solution:* Technology that significantly reduces infrastructure and equipment costs, making it possible to offer very affordable wireless voice and data services to *all* Americans.

Nationwide Licensing and Bidding Credits

- License the eight 1 MHz, paired channels (with a minimum of 14 MHz separation) on a *nationwide basis*.
 - Provides for a ubiquitous, wireless network.
 - Promotes economies of scale.
 - Received strong support in comments.
- Adopt the small business definitions proposed in the *NPRM* and use bidding credits to promote small business entry and entrepreneurial innovation.

Coexisting with Broadcast Facilities

- FreeSpace system makes it possible to create a nationwide wireless network that protects existing broadcast stations in Channels 60-69.
- Protect existing broadcast stations from interference until the end of the DTV transition, but do *not* authorize new broadcast facilities in Channels 60-69.
 - Received strong support in comments.