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**Donald C. Brittingham**  
Director – Wireless/Spectrum Policy  
202 589-3785

January 6, 2003

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 – 12<sup>th</sup> Street, SW  
Washington, DC 20554

Re: *Ex Parte* Meeting  
IB Docket No. 01-185  
ET Docket No. 00-258

Dear Ms. Dortch:

On January 3, 2003, Charla Rath of Verizon Wireless and the undersigned met with Tom Sugrue, Chief of the Wireless Telecommunications Bureau, and several members of his staff to discuss the potential reallocation of spectrum currently assigned to the Mobile Satellite Service (“MSS”) in accordance with the attached presentation. Attending with Mr. Sugrue were Kathleen Ham, Cathy Seidel, David Furth, Blaise Scinto, and Marty Liebman.

During the meeting, we discussed problems associated with the reallocation of unlicensed PCS spectrum in the 1910-1930 MHz band. In particular, we expressed concern regarding the potential for mobile-to-mobile interference as a result of reducing the guard band between PCS transmit and receive bands, and noted the limited ability of filter technologies to overcome this interference. The impact that any change in the guard band would have on current PCS operations must be thoroughly understood before any action is taken.

We also discussed adjacent channel interference issues that arise in conjunction with the deployment of MSS in the 1990-2025 MHz / 2165-2200 MHz bands and how those issues are affected by a reallocation of MSS spectrum to other uses. Specifically, the use of spectrum immediately above 1990 MHz for MSS (mobile transmit) would result in substantial interference to PCS mobile receivers operating just below 1990 MHz.

As is traditional for any mobile system, some guard band is required to separate mobile transmit frequencies from mobile receive frequencies. Without an adequate guard band, harmful interference would result when the mobiles are in close proximity to one another.

As the Commission considers the possible reallocation of MSS spectrum, it should bear in mind that any spectrum remaining for MSS should be assigned in a manner that does not cause harmful interference to existing services. If the lower MSS band is used for mobile transmit, the Commission should provide an adequate guard band to separate MSS from existing PCS operations. The Commission should carefully consider this issue before reaching a decision on MSS reallocation and seek additional information from the industry regarding the amount of guard band that is adequate to protect existing services.

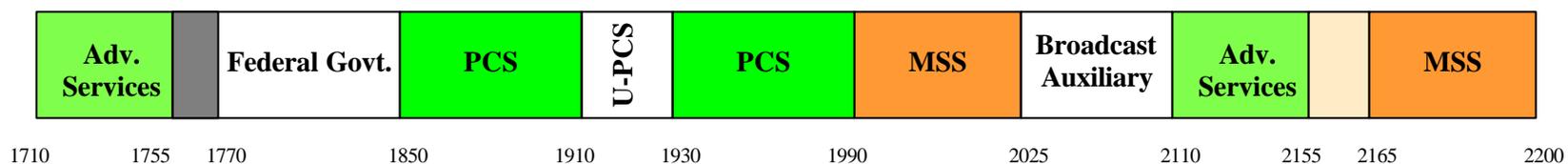
The Commission should also consider the manner in which the reallocated spectrum would be used and ensure that such uses would not themselves cause harmful interference to existing services. For example, some of the reallocated MSS spectrum above 2165 MHz may be used to accommodate MDS operations relocated out of the 2150-2160 MHz band. Verizon believes that this unpaired spectrum is likely to be used for fixed services that employ TDD technology. Since FDD and TDD systems require frequency separation to avoid harmful interference, this allocation should not be made below 2170 MHz because it would result in harmful interference to future advanced wireless services that will be deployed in the 2110-2155 MHz band recently allocated by the Commission. On the other hand, an MSS allocation in this band would not result in harmful interference because both bands would be used for mobile receive.

Please include a copy of this ex parte presentation in the record for the above captioned proceedings. If you have any questions, you may call me on (202) 589-3785.

#### Attachment

cc: T. Sugrue  
K. Ham  
C. Seidel  
D. Furth  
B. Scinto  
M. Liebman

# 1710 – 2200 MHz Band Plan



**Advanced Services (Mobile/Fixed).**



**Federal spectrum proposed for long-term reallocation to Advanced Services.**



**Commercial spectrum proposed for reallocation to advanced services.**



**Existing MSS allocation.**

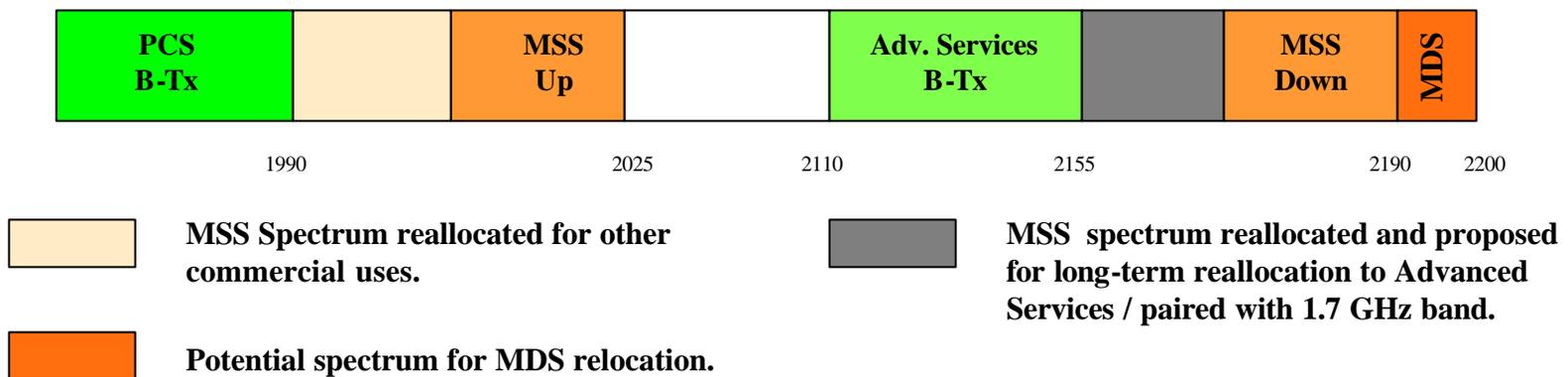


**PCS**

# Reallocation of MSS Band

1990-2025 MHz / 2165-2200 MHz

- How should band be configured if some, but not all, MSS spectrum were reallocated?

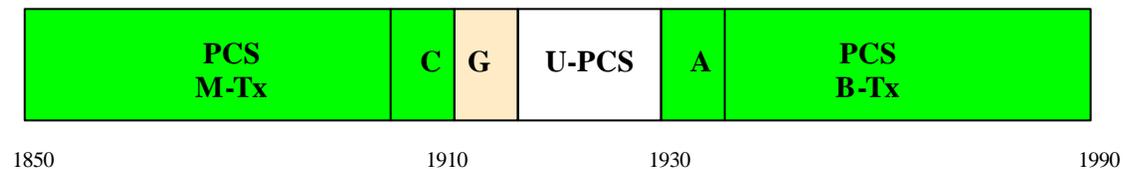


- There must be sufficient guard bands between PCS and MSS bands to prevent MSS mobiles from interfering into PCS handsets at the 1990 MHz band edge.
- Any new uses of spectrum above 1990 MHz must protect PCS mobiles – e.g., unlicensed.
- Interference to Advanced Services above 2110 MHz is not expected to be a problem since both MSS and Advanced Services would use the upper band for mobile receive.
- Relocated MDS band is likely to be used for TDD and should be separated from Advanced Services mobile receive band.

# Reallocation of U-PCS Band

1910-1930 MHz

- Should portion of U-PCS band be reallocated for new PCS spectrum (e.g., G block)?



- There must be sufficient guard bands between PCS transmit and receive bands to prevent G block mobile transmitters from interfering into A block mobile receivers.
- Question is not just about whether new mobiles can be designed to accommodate greater interference levels, but how **existing** PCS handsets (and customers) will be affected.

# PCS Receive Filter

