

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

In the Matter of

Amendment of Parts 1, 21, 73, 74)	WT Docket No. 03-66
and 101 of the Commission's)	
Rules to Facilitate the Provision)	
of Fixed and Mobile Broadband)	
Access, Educational and Other)	RM-10586
Advanced Services in the 2150-)	
2162 and 2500-2690 MHz Bands)	
)	
)	

To: The Wireless Telecommunications Bureau

COMMENTS OF COMSPEC CORPORATION

ComSpec Corporation ("ComSpec") hereby submits its Comments in response to the Commission's Notice Of Proposed Rule Making and Memorandum Opinion And Order, RM-10586, Released 2 April 2003.

ComSpec is a telecommunications consulting firm with significant experience in the interference studies and application process required by the Commission's Rules for the authorization of MMDS and ITFS facilities. Over the past eleven years, ComSpec has been involved with the development of coordinated traditional and two-way MMDS and ITFS stations in over 100 markets in the United States.

As referenced in the Introduction, the NPRM examines renovation of the current regulatory framework for MMDS and ITFS stations to support deployment of advanced two-way wireless broadband services. The NPRM was prompted in part by the White Paper submitted last October, with subsequent supplements submitted in November 2002 and in February 2003, by a Coalition consisting of the Wireless Communications Association International, the National ITFS Association and the Catholic Television Network.

The recommendations of the Coalition were the result of thousands of hours in analysis, research and discussions by a task group consisting of MMDS and ITFS operators, vendors, attorneys and technical consultants. ComSpec proudly served as an active member of this task group and enthusiastically supports the Coalition Proposal.

Reconfiguration of the 2500 - 2690 MHz Band: ComSpec supports the Coalition Proposal for division of the band into three segments with flexible use of the two 6 MHz-wide transition bands.

Utilization of Unassigned ITFS Spectrum: Our experience and observation of interference issues encountered within licensed and unlicensed spectrum directs the recommendation not to permit unlicensed “underlay” operation in this spectrum. While technology may be available to reduce the potential of interference between licensed and unlicensed operations, and a requirement for users to comply with technical “etiquettes” may work in some cases, the burden of tracking and identifying interference problems will fall on the licensed operator. In addition to reducing the predictability and reliability of licensed services, licensees will be forced to bring unresolved conflicts between licensed and unlicensed operations to the attention of the Commission’s Staff. Because of this potential of undue burden on the licensed operators and the Commission’s Staff, the public interest will be best served by a continued uniform standard of licensed-only operation in this spectrum.

Conversion of Site-By-Site Licenses of MDS and ITFS Incumbents to Geographic Service Areas: The Coalition Proposal provides a simple and familiar method of converting existing circular Protected Service Boundaries into Geographic Service Areas (“GSA”). This method of splitting the overlapping areas common between circular area boundaries provides a logical and consistent means to divide such mutually exclusive overlapping areas. With the subsequent determination of only one operator at any point within a service area, service to the public will now be possible in these areas with a minimum on interference.

In establishing Rules to define such Geographic Service Areas by splitting the overlapping area between incumbent licensees, it is recognized that calculation of the actual physical location of the boundary splitting the circular areas could vary depending on the

geographic projection used to determine the actual location of the circular boundary intersection points and corresponding bisecting line between those intersecting points. Our calculations have found that the location of the two points where the protected service area boundaries intersect could differ by as much as 11 km, depending on which geographic projection is utilized to plot the original circular boundaries. For an extreme example, if the location of intersecting boundary points between two 56.3 km radius circular boundaries representing sample service area boundaries for two MDS stations located 50 miles apart is determined first using a flat-earth projection, then determined using the Alber's Equal Area Conic projection, the resulting two sets of intersecting points are located approximately 11 km apart (for our sample, we used points in North Carolina). The location of the same two points determined between other common projections is only approximately 2 km apart. While additional study may be required in this area, a standard for calculating the intersecting points and corresponding boundary splitting the overlap area is needed.

Obviously, there will be cases, especially in heavily populated areas, where the precise location of these boundaries will be critical to operators in their system design and compliance to Rules regarding interference protection of neighboring facilities. To avoid future conflicts regarding interference issues between GSAs due to disputes as to the actual location of the overlap area dividing line, it is recommended the Commission standardize the process by either specifying the geographic projection to be utilized when calculating such boundaries, or by providing a public boundary file database for all incumbent protected service areas.

Revised Technical Rules To Enhance Licensee Flexibility, Protect Incumbent Operations and Support Mobile Operations: The Coalition Proposal is based on input from numerous industry equipment suppliers, engineers, consultants and licensees with the goal of establishing a flexible structure of operating requirements to accommodate utilization of various current and future fixed and mobile technologies. The proposed technical guidelines preserve the ability to continue the deployment of high-power, traditional services in one segment of the band while specifying advanced low-power services to be deployed in two other segments of the band without significant interference between different technologies. By establishing the spectrum

location for low-power and high-power services, by establishing Geographic Service Areas instead of site-based licensing and by establishing a set of operating requirements to provide interference protection between licensees, the Coalition Proposal provides a solid plan which accommodates both existing incumbent operations and allows flexible evolution of the band to support the new generation of fixed, nomadic and mobile broadband wireless services.

While the changes and guidelines proposed in the White Paper are complex, ComSpec believes the Coalition Proposal will encourage the most efficient deployment of advanced wireless broadband services to the public. ComSpec urges the Commission to incorporate the Coalition Proposal into the new Rules for the Instructional Television Fixed Service and the Multipoint Distribution Service.

Respectfully submitted,

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