Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendments of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands	)	WT Docket No. 03-66 RM-10586
	)	
Part 1 of the Commission's Rules – Further Competitive Bidding Procedures	)	WT Docket No. 03-67
	)	
Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage In Fixed Two-Way Transmissions	)	MM Docket No. 97-217
	)	
Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico	)	WT Docket No. 02-68 RM-9718

COMMENTS OF THE
CELLULAR TELECOMMUNICATIONS & INTERNET ASSOCIATION

The Cellular Telecommunications & Internet Association ("CTIA")[1] hereby submits comments in response to the Commission's April 2, 2003, *Notice of Proposed Rulemaking* ("NPRM")[2] requesting comment on changes to the rules governing licensing

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[1] CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, broadband PCS, ESMR, as well as providers and manufacturers of wireless data services and products.

[2] *See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Notice of Proposed*

of the Instructional Television Fixed Service ("ITFS"), the Multipoint Distribution Service ("MDS") and the Multichannel Multipoint Distribution Service ("MMDS"). In initiating this proceeding, the Commission notes that this rule examination will help "promote competition, innovation and investment in wireless broadband services, and to promote educational services."

As noted in previous comments, CTIA supports the continued reform of the Commission's spectrum policies to ensure that the wireless industry has sufficient spectrum to meet the future needs of consumers for innovative new wireless voice and data services. In light of the fact that some MDS and ITFS spectrum is underutilized, CTIA urges the Commission to take steps to configure these bands so as to optimize its usability for CMRS voice and data applications. In reconfiguring these bands, CTIA requests the Commission to take note of the deliberations of the International Telecommunications Union's ("ITU") Working Party 8F ("WP 8F") into consideration, while ensuring that reallocated spectrum in the 2500-2690 MHz band contains at least 5 MHz channels. CTIA also strongly supports the Commission's conclusion that there should not be restrictions or new regulatory mandates on CMRS providers operating in the 2500-2690 MHz band. Finally, it would not be appropriate for any reconfiguration of this band to include an unlicensed "underlay" component, which could cause harmful interference to licensed users and destroy the promise of this spectrum.

Rule Making and Memorandum Opinion and Order, WT Docket Nos. 03-67, 03-66, 02-68, MM Docket No. 97-217, RM-10586, RM-9718, FCC 03-56 (rel. April 2, 2003) (hereinafter "NPRM").

I. The MDS and ITFS Bands Should Be Configured to Optimize Their Usability for CMRS Services

In the NPRM, the Commission notes that significant portions of the spectrum in the MDS and ITFS bands remains unassigned and underutilized.[3] Much of the underutilization can be traced to existing rules that have "limited the ability of operators to deploy two-way services and made it nearly impossible to provide mobile services."[4] CTIA agrees with the Commission that a reorganization of the 2500-2690 bands is the best way to increase the overall utility and utilization of MDS and ITFS spectrum. To that end, CTIA encourages the Commission to take several key steps towards this goal.

First, CTIA urges the Commission to make any reconfigured spectrum in the MDS and ITFS bands available in at least 5 MHz channels that could be aggregated into larger blocks that would promote spectrum efficiency. This size channel will give providers the flexibility to offer new and innovative voice and data services in many areas that are currently underserved, including rural areas. In addition, it will also allow CMRS carriers and others providing services in the MDS and ITFS bands the ability to successfully aggregate and disaggregate spectrum, and allow carriers to make the most efficient use of limited spectrum resources as the demand for advanced data and voice service develops.

Second, CTIA requests that the Commission consider both the WP 8F deliberations, as well as the "Coalition" proposal, when reorganizing the MDS and ITFS bands in order to provide as much international "harmonization" as possible. As the

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[3] *See id*. at ¶ 26 ("Our MDS/ITFS licensing database system cannot readily show how many of these systems are currently deployed, but we believe that interference issues have severely limited licensees' ability to deploy low power services.").

[4] *Id*. at ¶ 2, n. 3.

Commission is well aware, the 2500-2690 MHz bands have been identified for IMT 2000 services.[5] International harmonization of the 2500-2690 MHz bands to the extent possible will promote more variety and lower costs for the products and services that can be developed for this spectrum due to the "economies of scale" that manufacturers would enjoy as they develop innovate products geared not just for the U.S. market, but also for the much larger world market.

Finally, the Commission should consider the challenges presented by unpaired TDD operations as it evaluates spectrum efficiency in this band. Under current technology, TDD and FDD operations would interfere with each other if they are in close proximity, without additional technical measures designed to protect against interference. The Commission should take these technical realities into account and design its service rules in a way that promotes spectrum efficiency.

II. The Commission Should Not Impose Any "Spectrum Caps" or Other Regulatory Restrictions on the Use of MDS or ITFS Spectrum BY CMRS Providers

CTIA agrees with the Commission's tentative conclusion in the NPRM that spectrum aggregation limits are "not necessary for the 2500-2690 MHz band."[6] In addition, CTIA also strongly agrees with the Commission's view that opening the 2500-2690 MHz bands to a wide range of applicants will "encourage entrepreneurial efforts to develop new technologies and service."[7] CTIA believes, however, that the Commission

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[5] *See id*. at ¶¶ 11, 13 (noting that the International Telecommunication Union ("ITU") and the Electronic Communications Committee ("EEC") of the European Conference of Postal and Telecommunications Administrations have identified the 2500-2690 MHz band for IMT-2000 use).

[6] *Id*. at ¶ 128.

[7] *Id.*

should also go beyond this statement, and ensure that no new standards, eligibility restrictions, or regulatory mandates are imposed on this spectrum that could inhibit the development of new CMRS products or services.

As the Commission notes repeatedly throughout the NPRM, one of the key reasons for the underutilization of MDS and ITFS spectrum are the numerous rule restrictions that currently prevent the most efficient use of that spectrum. CTIA urges the Commission not to repeat the mistakes of the past, and instead let the market determine the most efficient use of underutilized spectrum in the 2500-2690 MHz band.

III. The Commission Should Not Allow the Use of Unlicensed "Underlay" Operations in the 2500-2690 MHz Band

244.32DCBT/3Tj3122500-2690 MHz

In the NPRM, the Commission also requests comment on "possible revisions to

of temperature measuring devices and the sharing of data taken by nearby devices."[10] The establishment of such interference thresholds, particularly in the 2500-2690 MHz bands, will be an extremely time consuming and contentious process, especially because these bands involve both high-power and low-power operations. More importantly, it would be foolhardy for the Commission to attempt to promote unlicensed underlay operations in this band without having developed the framework and testing methodology for evaluating the feasibility of such offerings in a broader proceeding.

Due to the relatively short time-frame proposed for the reorganization of the 2500-2690 MHz bands, it would be nearly impossible to come anywhere close to determining acceptable interference thresholds for the MDS and ITFS bands. In fact, any unlicensed "underlay" operations will likely only have the effect of further diminishing the value of the 2500-2690 MHz band spectrum by subjecting licensed operations in those bands to unacceptable levels of interference. Such a step would go directly against the Commission's main goal in this proceeding – increasing the usefulness and efficiency of MDS and ITFS spectrum. Accordingly, CTIA urges the Commission to reject any plan to allow unlicensed "underlay" operations in the 2500-2690 MHz bands.

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[10] *Id.*

CONCLUSION

CTIA commends the Commission for its continued work towards spectrum reform, and its specific efforts to reorganize and reform regulation of the MDS and ITFS bands. As this proceeding moves forward, CTIA urges the Commission to make underutilized spectrum in the 2500-2690 MHz bands available to CMRS and other licensed users, and ensure that this spectrum is protected from interference by unlicensed users.

Respectfully submitted,

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