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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Petition for Rulemaking To Amend)
Eligibility Requirements in Part 78)
Regarding 12 GHz Cable Television)
Relay Service)

CS Docket No. 99-250
RM-9257

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

**COMMENTS OF
THE WIRELESS COMMUNICATIONS ASSOCIATION INTERNATIONAL, INC.**

The Wireless Communications Association International, Inc. ("WCA"), by its attorneys and pursuant to Section 1.415 of the Commission's Rules, hereby submits its initial comments in response to the *Notice of Proposed Rulemaking* ("NPRM") in this proceeding.^{1/}

WCA is the trade association of the fixed wireless broadband industry. Its members include, among others, licensees in the Multipoint Distribution Service ("MDS") and Instructional Television Fixed Service ("ITFS") and lessors of MDS and ITFS channel capacity who are eligible to hold licenses for 12.70-13.20 GHz ("12 GHz") Cable Television Relay Service ("CARS") facilities under Sections 78.13(d) and (e) of the Rules, and manufacturers of 12 GHz point-to-point transmission equipment. As such, WCA has a strong interest in the rules and policies that govern the ability of MDS/ITFS-based wireless broadband service providers to utilize the 12 GHz CARS band in connection with their offerings. For the reasons set forth below, WCA urges that, before the Commission substantially expands eligibility for CARS licenses in the already congested 12 GHz band and permits the use of the 12 GHz band for the distribution of video programming directly to

^{1/}*Petition for Rulemaking To Amend Eligibility Requirements in Part 78 Regarding 12 GHz Cable Television Relay Service*, FCC 99-166, CS Docket No. 99-250 (rel. July 14, 1999)[hereinafter cited as "NPRM"].

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subscriber premises,^{2/} the Commission should adjust Part 78 of the Rules to accommodate efforts by current CARS eligibles to meet the growing demand for video and non-video broadband wireless services.^{3/}

^{2/}As set forth *infra*, WCA believes that the only time a subscriber should be permitted to receive video or non-video directly from a 12 GHz facility is in those rare cases where the subscribers happen to be located at the site where an MDS/ITFS system operator has located a 2 GHz transmission facility that is connected to a 12 GHz CARS backbone.

^{3/}While WCA believes it would be premature for the Commission to permit new eligibles to secure primary licenses in the 12 GHz band at this juncture, WCA would not oppose permitting new eligibles to secure secondary licenses that would be conditioned on the avoidance of interference to primary licensees and the acceptance of interference from primary licensees as suggested in Paragraphs 5 and 24 of the *NPRM*. By proceeding in such a fashion, the Commission can assure that the 12 GHz band, which already hosts more than 105,000 terrestrial facilities (*see NPRM*, at ¶ 23 n. 69), will not become overly congested just as demand is growing for 12 GHz backbone facilities.

In any event, WCA strongly opposes the use of auctions for awarding 12 GHz CARS authorizations. *See NPRM* at ¶ 24. While the *NPRM* is correct in noting that Section 309(j) of the Telecommunications Act of 1996 requires the Commission to utilize auctions where mutually-exclusive applications are accepted for filing, it is equally true that the Commission has an obligation to minimize mutual-exclusivity where it can do so. *See* 47 U.S.C. § 309(j)(6)(E) (statutory obligation to “use engineering solutions, negotiation, threshold qualifications, and other means in order to avoid mutual exclusivity in application and licensing proceedings”); *see also* H.R. Conf. Rep. No. 105-217, 105th Cong., 1st Sess., at 572 (Conference Report on Balanced Budget Act of 1997 specifically focusing on Commission’s obligation not to overlook engineering solutions and other tools that could avoid mutual exclusivity). The current system of prior frequency coordination under Section 78.36 of the Rules, which precludes the filing of mutually-exclusive applications, has served the cable and MDS industries well, avoiding disputes over licensing and assuring that, to the maximum extent possible without causing interference, all system operators in a given market can secure the point-to-point facilities they need to support their primary distribution technologies. While auctions have worked well where the most efficient use of the spectrum is to license one entity to be the sole service provider over given spectrum in a given area, it would be inappropriate to apply the auction system where the spectrum is used for point-to-point links and maximum spectral efficiency is achieved through the coordination of spectrum use among multiple system operators. Indeed, the Commission previously decided not to subject point-to-point microwave services to auction, recognizing that auctioning intermediate links “might lead to significant delays in the provision of services thus

Due to a combination of factors, not the least of which include the passage of the Telecommunications Act of 1996 and the Commission's embrace of flexibility in the regulation of spectrum-based services, the communications industry has moved rapidly towards an environment in which service providers will be offering consumers bundled offerings that include a variety of video, voice and data services that previously had only been available separately. The wireless cable industry has been at the forefront of this trend. As the Commission is well-aware, wireless cable system operators were among the first providers of wireless high-speed Internet access services.^{4f} And, acting upon a petition for rulemaking submitted by a coalition of WCA and over 110 other participants in the industry, less than a year ago the Commission released its *Report and Order* in MM Docket No. 97-217 and radically revised its MDS and ITFS rules to afford licensees the flexibility to provide video, voice and/or data services on a routine basis utilizing two-way wireless communications technology.^{5f} In its subsequent report to Congress on the status of competition in the multichannel video marketplace, the Commission predicted that: "[t]he advent of digital MMDS

hindering the development and rapid deployment of new technologies, products and services for the benefit of the public." *See Amendment of Section 309(j) of the Communications Act -- Competitive Bidding*, 9 FCC Rcd 2348, 2355-56 (1994).

^{4f}*See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, 14 FCC Rcd 2398, 2428 (1999). *See also* "The Mass Media Bureau Implements Policy for Provision of Internet Service on MDS and Leased ITFS Frequencies," *Public Notice*, 11 FCC Rcd 22419 (1996).

^{5f}*See Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions*, 13 FCC Rcd. 19,112 (1998)("MDS/ITFS Flexible Use Order") *on recon.*, FCC 99-178 (rel. July 29, 1999).

and the recent authorization of two-way MMDS service that will make high-speed Internet and telephony possible have the potential to foster renewed MMDS growth.”^{6/} That prediction has proven accurate -- since it was made the MDS industry has undergone revolutionary change, with Sprint Corp. and MCI Worldcom, Inc. acquiring virtually all of the major wireless cable operators in order to secure spectrum for the provision of “last mile” wireless broadband services to residential and business subscribers.^{7/}

Unfortunately, while the *MDS/ITFS Flexible Use Order* provided MDS and ITFS licensees the flexibility to offer a wide variety of non-video service offerings, the *NPRM* in this proceeding does not follow suit. To the contrary, although both the cable industry and the MDS/ITFS industry are rapidly moving towards the use of their primary facilities for the distribution of a panoply of non-video services, the *NPRM* evidences a steadfast resistance to amending the CARS rules to accommodate the need for point-to-point microwave backbone to support those services. Indeed, rather than proposing elimination of the video-only restriction that is being rendered obsolete by the

^{6/}*Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, 13 FCC Rcd 24,284, 24,336 (1998).

^{7/}See J. Barthold, “Sprint Readies MMDS High-Speed Service,” *Cable World* 8 (April 14, 1999)(reporting on Sprint Corp. plans to serve small businesses and consumers with its integrated-on-demand network using MDS spectrum); P. Colman, “MCI Worldcom Eyes CAI,” *Broadcasting & Cable* 37-38 (April 26, 1999) (discussing Sprint and MCI plans to penetrate small- and mid-sized business markets); M. Farrell, “Sale of Wireless Cable Firms Moves Ahead,” *Multichannel News* 21 (July 12, 1999) (MCI “plans to use CAI’s wireless cable spectrum to provide the ‘last-mile’ connection to customers’ homes . . .”); M. Farrell, “MCI Buys Another MMDS Operator,” *Multichannel News* 14 (July 26, 1999) (quoting MCI’s representative’s statement that the acquisition of wireless cable operator, Wireless One, Inc., “provides another alternative to directly reach customers specifically with broadband-data services”).

Commission's own efforts at promoting convergence, the *NPRM* "do[es] not propose to change the principal use of CARS as a tool for relaying video programming between and among the components of a cable or other eligible system."^{8/} While the Commission implicitly acknowledges that CARS eligibles are moving away from providing only video services, the *NPRM* merely inquires "whether and to what extent CARS licensees should be permitted to provide voice or data using the 12 GHz CARS band *provided the principal use remains the delivery of video programming . . .*" and goes no further than to suggest that it might be appropriate for a CARS licensee to utilize two channels for ancillary services so long as it uses sixty channels for video programming.^{9/}

It is difficult to square the *NPRM*'s proposed approach with the Commission's general trend towards allowing licensees flexibility in the use of their licensed spectrum.^{10/} At a time when the Commission has increasingly recognized that the public interest is best served by allowing the marketplace, not regulators, to dictate how spectrum is best utilized, it is strange that the *NPRM*

^{8/}See *NPRM*, at ¶ 25.

^{9/}*NPRM*, at ¶ 25 (emphasis added).

^{10/}See, e.g., *Rulemaking to Amend Parts 1, 2, 21 and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, 12 FCC Rcd 12545, 12637-12638 (1997)(LMDS allocated for flexible uses); *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40 GHz Bands*, 12 FCC Rcd 18,600, 18,633-34 (1997) (flexible use allocation for 38 GHz service); *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service*, 12 FCC Rcd 10785, 10841-65 (1997)(allocating WCS spectrum to flexible uses); *Allocation of Spectrum Below 5 GHz Transferred From Federal Government Use*, 11 FCC Rcd 624, 633 (1995) (flexible use for GWCS); *Amendment of the Commission's Rules to Establish New Personal Communications Services*, 7 FCC Rcd 5676, 5681 (1992)(use of PCS spectrum for a broad array of services, including wireless local loop, using mobile or fixed architectures).

proposes to restrict CARS use primarily to the distribution of video programming without so much as a discussion of the public interest benefits of allowing more flexible use.

Given the limited experience in the provision of broadband services to the public, it is far too early to determine with any degree of precision what mix of video, voice and/or data services consumers will demand from their wireless broadband service providers. Thus, it is not surprising that the *NPRM* offers no support for the Commission's apparent proposal to permit CARS licensees to transmit something on the order of just two channels of non-video material for every 60 channels of video programming.^{11/} At this early date, there is no basis to conclude that a video/non-video ratio of 60:2, or any other ratio for that matter, will allow CARS licensees to feed their primary distribution facilities with a service mix that meets consumer demand. Therefore, the Commission should be doing in this proceeding what it has done so many other times of late -- affording licensees the flexibility to use their transmission capacity as they see fit to respond rapidly to changing marketplace demand.

Unless the Commission reverses course and permits cable and MDS eligibles the flexibility to use 12 GHz CARS for non-video backbone transmissions, the Commission will adversely impact the ability of the MDS industry to take full advantage of the flexibility afforded in the *MDS/ITFS*

^{11/}It is worth noting that the *NPRM* begs the question of how material transmitted over CARS would be classified. If, for example, digital bits are transmitted over a CARS facility using TCP/IP with the intent that those bits be reconstructed by the end user into video, would such usage be considered video or data? As Chairman Kennard has recognized, companies such as Broadcast.Com that will be providing streaming video over broadband are, for all intents and purposes, "broadcasters." See Kennard, "From the Vast Wasteland to the Vast Broadband," Speech to the National Association of Broadcasters, Las Vegas, NV (delivered April 20, 1999). As the cable and MDS/ITFS industries increasingly move towards the digital domain, efforts to pigeonhole transmitted material based on its content will prove increasingly difficult.

Flexible Use Order. Obviously, one cannot provide subscribers video, voice and data services over MDS/ITFS if one cannot relay non-video material to the MDS/ITFS transmission facilities. In its 1990 decision permitting MDS/ITFS licensees and lessors access to the 12 GHz CARS allocation, the Commission recognized the pressing need for wireless cable system operators to use the 12 GHz band for backbone links to their MDS/ITFS transmission systems.^{12/} Nothing has occurred in the interim to alleviate that need. To the contrary, the MDS/ITFS industry's need for 12 GHz point-to-point backbone will expand as wireless broadband system operators begin to take advantage of the Commission's new streamlined rules governing the licensing and use of MDS/ITFS cells and require 12 GHz links to interconnect those cells.^{13/} And, that need exists whether the MDS transmission facility is transmitting video, voice, data or any combination or permutation of the three. Yet, unless Part 78 is amended, a MDS/ITFS system that today depends upon 12 GHz backbone links will have to cease operation of those links as it transitions to providing non-video services. In short, the growth of the MDS industry foreshadowed by the *MDS/ITFS Flexible Use Order* will be stunted, as system operators will be unable to secure the backbone facilities they need to deploy advanced fully digital, two-way cellularized system designs.^{14/}

^{12/}*Amendment of Parts 21, 43, 74, 78, and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational-Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service*, 5 FCC Rcd 6410, 6423 (1990)[hereinafter cited as "*MDS/ITFS CARS Eligibility Order*"].

^{13/}*See MDS/ITFS Flexible Use Order*, 13 FCC Rcd at 19,119.

^{14/}The 17.70-19.70 GHz band, which has also been relied upon by the wireless cable industry, offers little prospect for satisfying this demand, particularly given the Commission's admission that future use of the 17.70-19.70 GHz band will be limited by increasing use of that

The absurdity of this result is compounded by the fact that non-cable, non-MDS/ITFS licensees are free to utilize the 12 GHz band for non-video point-to-point applications under the Part 101 Private Operational Fixed Microwave Service (“OFS”) rules. However, while non-video use generally is permitted for 12 GHz facilities licensed under Part 101, Section 101.603(b) of the Rules prevents OFS stations from being “used to provide the final RF link in the chain of transmission of program material to cable television systems [or] multipoint distribution systems . . .”^{15/} Thus, regardless of what action the Commission takes in this proceeding, the 12 GHz band can and will be used for non-video applications. The only question is whether the Commission will continue to bar cable and MDS systems from using the 12 GHz band as backbone for the transport of non-video information to their primary transmission systems. At a time when the Commission is under a directive from Congress to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . [by] remov[ing] barriers to infrastructure

band for satellite systems. See *NPRM*, at ¶ 21.

^{15/}At the time the predecessor of Section 101.603(b) was adopted in 1983 by the *Memorandum Opinion and Order* in Docket No. 19671 (54 Rad. Reg. 439 (P&F 1983), MDS licensees were required to operate as common carriers and, as such, had ample access to point-to-point microwave spectrum (including spectrum quite near the 12 GHz band) under what was then Subpart I of Part 21 of the Commission’s Rules. See 47 C.F.R. §21.700 *et seq.* (1983). Although access to point-to-point spectrum was not a significant issue when the Commission permitted MDS licensees to operate as non-common carriers (and thus denied them access to common carrier point-to-point microwave) in 1987, by 1990 MDS licensees were clamoring for access to additional point-to-point spectrum, leading the Commission to make MDS licensees eligible for the 12 GHz band CARS allocation. See *MDS/ITFS CARS Eligibility Order*, 5 FCC Rcd at 6423.

investment,"^{16/} continuing restrictions on the non-video use of the 12 GHz CARS band by cable and MDS/ITFS eligibles is impossible to justify.

Finally, although WCA generally opposes expanding the permissible uses of CARS to include the distribution of video programming directly to subscribers because it will deprive current eligibles of the spectrum they need for backbone facilities, WCA believes that one exception should be made. As noted above, particularly given the Commission's adoption in the *MDS/ITFS Flexible Use Order* of new rules governing the deployment of MDS and ITFS cells, there will be an increasing demand for the use of 12 GHz CARS to relay material to cells for distribution over MDS/ITFS cellular facilities. In all likelihood, many of those cells will be located atop residential and commercial buildings, just like cellular and PCS cells. In such situations, the Commission should permit the 12 GHz CARS backbone links also to be used to serve residential or commercial subscribers located at the cell site itself. Otherwise, system designers may find themselves having to employ designs that inefficiently use spectrum in order to provide 2 GHz service to buildings that are already linked to the network by 12 GHz facilities. Simply put, adoption of WCA's approach will not result in the deployment of additional 12 GHz links (since only links that are also providing backbone service to cells will be allowed to be used to serve subscribers), but will result in more efficient design of 2 GHz MDS/ITFS systems and eliminate the need for emerging wireless broadband service providers to needlessly deploy redundant facilities.

In conclusion, at a time when existing CARS eligibles will be experiencing greater need for

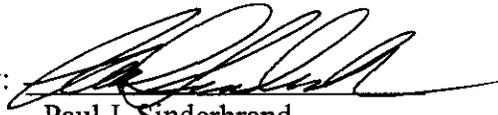
^{16/} Telecommunications Act of 1996, Pub. L.. No. 104-104, Title VII, § 706, 110 Stat. 153, reproduced at notes under 47 U.S.C. § 157.

12 GHz band point-to-point backbone facilities, it would be inappropriate for the Commission to substantially expand eligibility or permit radical new uses of the band. However, it is clear that like so many of the Commission's Rules, the regulatory structure for the licensing and use of the 12 GHz band has become obsolete as a result of the trend towards convergence of video, voice and data services in the marketplace. This proceeding offers the Commission a vehicle for bringing Part 78 into conformance with the marketplace.

Respectfully submitted,

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