# Before the Federal Communications Commission Washington DC 20554

In the Matter of	)		
	)		
Amendment of Part 101 of the Commission's	)	RM-	
Rules to Provide for Conditional Authorization	)		
on Additional Channels in the 23 GHz Band	j		

## PETITION FOR RULEMAKING

The Fixed Wireless Communications Coalition submits this Petition for Rulemaking pursuant to Section 1.401 of the Commission's Rules.<sup>1</sup> Alternatively, as discussed below, we ask that the Commission treat this pleading as a suggestion that it initiate a rulemaking on its own motion pursuant to Section 1.411.

## A. SUMMARY

The National Telecommunications and Information Administration (NTIA), which administers spectrum for the federal government, has approved conditional licensing of two additional channel pairs for non-federal use in the 23 GHz band, which is shared between federal and non-federal users.

The present request seeks a pro forma rule change to implement the NTIA decision.

The FWCC is a coalition of companies, associations, and individuals interested in the fixed service -- i.e., in terrestrial fixed microwave communications. Our membership includes manufacturers of microwave equipment, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV and private cable providers, backhaul providers, and/or their respective associations, communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz. For more information, see www.fwcc.us

The change requested here in the public interest. Because it will not disadvantage any party, we ask the Commission to bypass comments and replies on this Petition, and instead release a Notice of Proposed Rule Making on its own motion.

The FWCC has today filed a parallel Request for Waiver Pending Rulemaking that seeks conditional licensing of the two additional channel pairs while the rulemaking procedures play out.

# B. BACKGROUND

Section 101.31 of the Commission's Rules provides for "conditional authorization" of fixed microwave links.<sup>2</sup> A license applicant may begin operating a link as soon as the application is filed, if the link has been frequency coordinated and certain other conditions are met.<sup>3</sup> The applicant agrees to cease operation immediately if the application is dismissed or denied.<sup>4</sup>

Because fixed service facilities must often be installed on short notice to meet urgent needs, conditional licensing has been an important element of the rules. Fixed service bands carry critical services such as public safety communications (including police and fire vehicle dispatch), coordinating the movement of railroad trains, controlling natural gas and oil pipelines, regulating the electric grid, and backhauling wireless telephone traffic. In addition, they carry

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. Sec. 101.31(b).

In addition to the conditions mentioned in text, the antenna structures must either have or not need FAA approval, the application must not require a waiver or an Environmental Assessment, the station site must lie outside certain specified areas (depending on frequency band), and the link must operate in accordance with its frequency coordination. *See* 47 C.F.R. Sec. 101.31(b)(1)(ii)-(vi), (viii).

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. Sec. 101.31(b)(2), (3)

large amounts of business data. Conditional licensing allows providers to meet public safety, infrastructure, and commercial needs with minimum delay.

The 23 GHz band is an important part of the fixed service mix. All of the available bands -- the 4, 6, 10, 11, and 23 GHz bands, and the remaining fixed service allocation at 18 GHz -- are subject to serious limitations. Satellite earth stations in the 4 and 6 GHz bands, which are routinely coordinated and licensed for the entire band and satellite arc, block many fixed service coordination efforts. Coordination at 4 GHz is all but impossible nationwide, due to the proliferation of registered receive-only satellite dishes. Similarly, earth station congestion has made the lower 6 GHz band largely unavailable in and near major population centers, where the need for fixed service communications is greatest. Ongoing international negotiations threaten to impair fixed service operation at 10 GHz. New rules allowing smaller antennas in the 11 GHz band, while very welcome, will greatly increase usage over the next few years.<sup>5</sup> There is little 18 GHz spectrum left for the fixed service, following recent reallocations to satellite operations.<sup>6</sup> The Commission should enable the fixed service industry to make full use of the limited spectrum still available.

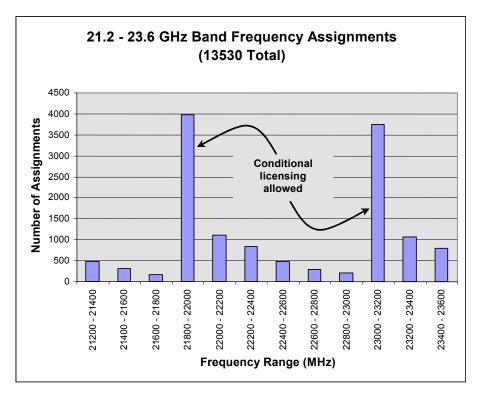
The propagation characteristics of 23 GHz make it suitable for wireless backhaul over relatively short distances.<sup>7</sup> The growing sophistication of end-user wireless devices and services -- from cell phones to AWS and beyond; from voice and then music to real-time video -- triggers

<sup>&</sup>lt;sup>5</sup> Antenna Requirements for the 10.7-11.7 GHz Band, WT Docket No. 07-54, Report & Order, FCC 07-163 (released Sept. 10, 2007).

Redesignation of the 17.7-19.7 GHz Frequency Band, 15 FCC Rcd 13430 (2000).

In this context, backhaul is the transport of customer communications between the carrier's central network facilities and the towers that send radio signals to and from customer handsets.

corresponding increases in demand for backhaul capacity. At the same time, as wireless providers continue subdividing their cells to extract the maximum usage from costly spectrum, the number of towers requiring backhaul increases in proportion. The 23 GHz band (along with others, especially 11 GHz) is vital to filling this need.



23 GHz Frequency Assignments (Comsearch Data 6/23/07). Includes Licensed, Applied for and Prior Coordinated Data.

Importance of conditional licensing. Fixed service operators have demonstrated the value of conditional licensing at 23 GHz. The graph shows the numbers of frequency coordinations in 200 MHz increments across the 23 GHz band. The 21.8-22.0 and 23.0-23.2 GHz segments, in which conditional licensing is currently allowed, average almost seven times the number of links as others. Operators choose these, even though frequency coordination may

be easier on more sparsely used channels, because they need conditional licensing to meet users' needs.

# C. REQUEST FOR RULE CHANGE

NTIA has approved conditional licensing on additional channel pairs 22.025/23.225 GHz and 22.075/23.275 GHz

Section 101.31(b)(1) of the rules presently provides:

An applicant for a new point-to-point microwave radio station(s) or a modification of an existing station(s) in the . . . 21,800-22,000 MHz, and 23,000-23,200 MHz bands . . . may operate the proposed station(s) during the pendency of its applications(s) upon the filing of a properly completed formal application(s) that complies with subpart B of part 101 if the applicant certifies that the following conditions are satisfied:

[...]

(vii) With respect to the 21.8-22.0 GHz and 23.0-23.2 GHz band, the filed application(s) does not propose to operate on a frequency pair centered on other than 21.825/23.025 GHz, 21.875/23.075 GHz, 21.925/23.125 GHz or 21.975/23.175 GHz . . . . 8

We ask to add the two new pairs to this rule, as shown in the Appendix. That is the only change requested.<sup>9</sup>

#### D. PUBLIC INTEREST

A grant of the requested rule change will enable fixed service providers to initiate service quickly on more 23 GHz links, thus improving service to infrastructure facilities, public safety, transportation, and wireless broadband, among others.

<sup>&</sup>lt;sup>8</sup> 47 C.F.R. Sec. 101.31(b)()(vii).

The new pairs will be subject to all existing requirements, including the EIRP limit of 55 dBm and the obligation to coordinate non-federal license applications through the Frequency Assignment Subcommittee of the Interdepartment Radio Advisory Committee.

We are not aware of any downside to this request as to any party.

The requested change is therefore in the public interest.

# E. REQUEST FOR EXPEDITED TREATMENT

Ordinarily the Commission would place this Petition on public notice, receive comments and reply comments, and eventually issue a Notice of Proposed Rule Making, if merited.<sup>10</sup> That part of the process typically takes about a year. The Commission would then receive comments and reply comments on the NPRM, and in due course issue a Report and Order.<sup>11</sup> That second stage typically requires at least another year.

Because the present request has no conceivable adverse effect on any party,<sup>12</sup> we suggest that the Commission forgo the first round of comments and replies, and instead proceed directly to a Notice of Proposed Rule Making on its own motion, as provided for under the rules.<sup>13</sup>

See generally 47 C.F.R. Secs. 1.401-1.407.

<sup>&</sup>lt;sup>11</sup> 47 C.F.R Secs. 1.412-1.425.

The sole negative effect, if any, is on the federal spectrum managers, who have signed off on the proposal.

<sup>&</sup>quot;Rulemaking proceedings are commenced by the Commission, either on its own motion or on the basis of a petition for rulemaking. See §§1.401–1.407 [on petitions for rulemaking]." 47 C.F.R. Sec. 1.411.

# **CONCLUSION**

For the reasons presented above, the Commission should act on the requested rule change at the earliest possible time.

Respectfully submitted,

/s/

Mitchell Lazarus
FLETCHER, HEALD & HILDRETH, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, VA 22209
703-812-0440
Counsel for the Fixed Wireless
Communications Coalition.

November 7, 2007

### **APPENDIX**

The Fixed Wireless Communications Coalition requests the following change to Section 101.31(b)(1)(vii) of the Commission's Rules. Deletions are shown in strikeout and additions in double underline.

With respect to the 21.8-22.0 GHz and 23.0-23.2 GHz band, the filed application(s) does not propose to operate on a frequency pair centered on other than 21.825/23.025 GHz, 21.875/23.075 GHz, 21.925/23.125 GHz, or 21.975/23.175 GHz, 22.025/23.225 GHz or 22.075/23.275 GHz and does not propose to operate with an E.I.R.P. greater than 55 dBm. The center frequencies are shifted from the center frequencies listed above for certain bandwidths as follows: add 0.005 GHz for 20 MHz bandwidth channels, add 0.010 GHz for 30 MHz bandwidth channels, and subtract 0.005 GHz for 40 MHz bandwidth channels. See specific channel listings in Sec. 101.147(s).

## COURTESY SERVICE LIST

Chairman Kevin J. Martin Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Commissioner Michael J. Copps Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Commissioner Jonathan S. Adelstein Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Commissioner Deborah Tate Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Commissioner Robert McDowell Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Fred Campbell, Chief Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Jim Schlichting, Deputy Chief Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Cathy Massey, Deputy Chief Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554 Jane Jackson, Associate Chief Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Mary Bucher Assistant Chief/Senior Technical Advisor Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Joel Taubenblatt, Chief Broadband Division Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

John Schauble, Assistant Chief Broadband Division Wireless Telecommunications Bureau Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Karl Nebbia, Associate Administrator National Telecommunications and Information Administration Department of Commerce 1401 Constitution Avenue, N.W. Washington, D.C. 20230

Fredrick Matos
Office of Spectrum Management
National Telecommunications
and Information Administration
Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230