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March 13, 2009

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

**Re: Fixed Wireless Communications Coalition, Amendment of Sections 101.109
and 101.147 of the Commission's Rules to Accommodate 30 MHz Channels
in the 6525-6875 MHz Band, RM-11417**
Ex parte Communication

Dear Ms. Dortch:

On behalf of the Fixed Wireless Communications Coalition (FWCC), pursuant to Section 1.1206(b)(2) of the Commission's Rules, I am electronically filing this letter to report oral *ex parte* communications in the above-referenced docket.

On March 11, Chris Hardy of Comsearch (a member of the FWCC) and I met separately with Paul Murray of Acting Chairman Copps's office, Renée Crittendon of Commissioner Adelstein's office, and Angela Giancarlo of Commissioner McDowell's office. We urged prompt action on two rulemaking petitions filed by the FWCC, including the one captioned above. (The other has not appeared on public notice and does not have a docket number.) A copy of our presentation outline is attached.

Please do not hesitate to call with any questions.

Respectfully submitted

Mitchell Lazarus
Counsel for the Fixed Wireless
Communications Coalition

cc: Meeting participants

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Fixed Wireless Communications Coalition

**Requested Rule Changes in
the 23 GHz and 6 GHz
Fixed Service Bands**

Federal Communications Commission

March 11, 2009

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About the FWCC

- A coalition of companies, associations, and individuals interested in the Fixed Service (terrestrial fixed microwave communications)
 - formed in 1998
 - speaks for the Fixed Service community
 - active in 40+ FCC proceedings
 - also NTIA, FAA, courts, etc.

FWCC Membership

- Microwave equipment manufacturers
- Fixed microwave engineering firms
- Licensees of fixed microwave systems (and associations)
- Communications service providers (and associations)
- Major end users (railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV and private cable providers) and/or their respective associations
- Backhaul providers, communications carriers
- Telecommunications attorneys and engineers.

Conditional Licensing

- ❑ Allows applicant to operate as soon as application is filed if:
 - frequency coordination is complete
 - no FAA or environmental issues; outside certain areas
 - no waiver required
- ❑ Applies to all fixed service bands through 23 GHz
 - **in 23 GHz band, conditional licensing limited to four specified frequency pairs**
- ❑ Conditional licensing greatly speeds up start of operation
 - with conditional licensing: 2-4 weeks
 - without: 9-18 weeks.

23 GHz Request

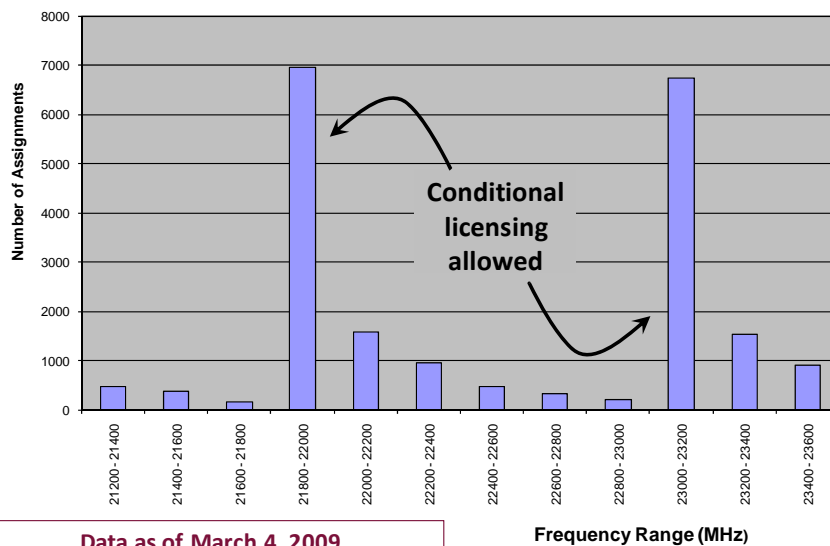
Filed November 7, 2007
No public notice, no docket number

About the 23 GHz Band

- ❑ Ideal for wireless backhaul over short distances
 - AWS and 700 MHz will greatly increase demand
- ❑ Shared with Federal government users
 - most frequencies must be coordinated with NTIA prior to operation – takes several weeks
- ❑ NTIA long ago set aside four frequency pairs that do not require coordination
 - specified in Part 101
 - *only these pairs are eligible for conditional licensing*
 - operators strongly prefer these (next slide).

Users Prefer Conditional Licensing

21.2 - 23.6 GHz Band Frequency Assignments
Licensed, Applied-For, and Proposed



Data as of March 4, 2009
Each bar denotes four 50 MHz channels

FWCC Request

- ❑ In 2007, NTIA approved two additional 23 GHz pairs for conditional licensing
- ❑ **FWCC seeks to add those two pairs to Part 101**
 - no conceivable disadvantage to any party.

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6 GHz Request

**Filed February 4, 2008
Docket No. RM-11417**

Slide 8

6 GHz Band -- Applications

- ❑ Along with other fixed service bands, 6 GHz carries critical services:
 - public safety (including police and fire vehicle dispatch)
 - coordinating movement of railroad trains
 - controlling natural gas and oil pipelines
 - regulating the electric grid
 - telephone and Internet traffic
- ❑ Very large amounts of business data.

6 GHz Band – Properties

- ❑ Best band available for long links (tens of miles)
 - lower frequencies travel farther
 - 2 GHz band reallocated to PCS, other services
 - 4 GHz band clogged with receive-only earth stations
 - **6 GHz band – typical max. 30-35 miles**
 - 11 GHz band – typical max. only 10-12 miles
 - higher bands – shorter distances
- ❑ 6 GHz band divided:
 - 5925-6425 MHz: “Lower 6”
 - 6525-6875 MHz: “Upper 6”

Authorized Bandwidths

- ❑ Operators must use channel bandwidths listed in the rules
- ❑ Higher bandwidths give higher data speeds (see table).

| Bandwidth | Min. Speed (Mbits/sec) |
|-----------|------------------------|
| 400 kHz | 1.54 |
| 800 kHz | 3.08 |
| 1.25 MHz | 3.08 |
| 2.5 MHz | 6.17 |
| 3.75 MHz | 12.3 |
| 5 MHz | 18.5 |
| 10 MHz | 44.7 |
| 30 MHz | 134.1 |

Bandwidths in Upper 6 and Lower 6

| Sub-Band | Authorized Bandwidths | Remarks |
|---|---|--|
| <p>Lower 6 GHz 5925-6425 MHz</p> | <p>400 kHz 800 kHz 1.25 MHz 2.5 MHz 3.75 MHz 5 MHz 10 MHz 30 MHz</p> | <p>shared with approximately 4,200 uplink satellite earth stations</p> |
| <p>Upper 6 GHz 6525-6875 MHz</p> | <p>400 kHz 800 kHz 1.25 MHz 2.5 MHz 3.75 MHz 5 MHz 10 MHz Not listed: 30 MHz</p> | <p>requires waiver of rules for high-speed (30 MHz) links</p> |

FWCC Request

- ❑ Presently, 30 MHz bandwidth in Upper 6 requires a waiver
 - usually granted – but no conditional licensing
 - 2-4 months' delay before operation can begin
- ❑ **FWCC request: add 30 MHz bandwidth to Upper 6**
 - will allow fast licensing of long, high-capacity links
- ❑ Supporting comments from:
 - Comsearch (leading frequency coordinator)
 - Radio Dynamics Corp. (frequency coordinator)
 - AT&T Inc. (major fixed service licensee)
 - Harris Stratex Networks (major radio equipment supplier).

One Opposition Filed

- ❑ American Petroleum Institute (FWCC member; major licensee) opposed 30 MHz bandwidths in Upper 6, saying:
 - would cause congestion similar to Lower 6, obstruct relocation from 2 GHz
 - could encourage speculative licensing
 - delays due to need for waiver are not a problem
- ❑ FWCC reply:
 - congestion in Lower 6 is due to earth stations, not 30 MHz channels
 - speculative licensing would violate FCC rules on construction and loading
 - other licensees find waiver delays to be a problem.

Conclusion

- The Commission should promptly issue an NPRM incorporating the FWCC's requests as to the 23 GHz and 6 GHz bands.

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Thank you!