

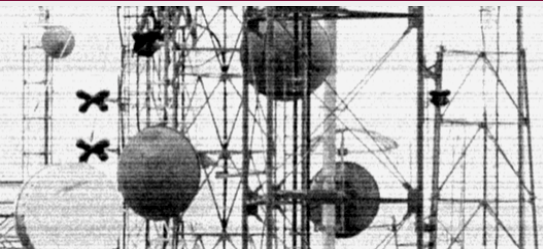
# **Industry Round Table: Fixed Service**

## **National Spectrum Management Association**

**May 19, 2010**

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# FCC National Broadband Plan

- ❑ FCC: more backhaul needed for mobile broadband
- ❑ Intends to consider:
  - revising Parts 74, 78, 101 for more spectrum sharing
  - revising rules for more flexibility and cost-effectiveness:
    - to allow more spatial reuse of microwave frequencies (citing Wireless Strategies proposal)
    - to allow adaptive modulation
    - to allow smaller antennas
    - to authorize higher frequencies.

## 6 & 23 GHz Rulemaking (WT 09-114)

- 23 GHz: add two pairs for conditional licensing
  - will bring total to six pairs
  - rulemaking petition filed Nov. 7, 2007
- 6 GHz: add 30 MHz channels to upper 6 GHz band
  - present maximum bandwidth 10 MHz
  - rulemaking petition filed Feb. 4, 2008
- NPRM released June 29, 2009
  - included immediate waiver of 23 GHz issue
  - no opposition
- Circulating for Commissioners' signatures since April 9.

# Adaptive Modulation

- Request for Interpretation filed May 8, 2009 by:
  - Alcatel-Lucent, Dragonwave, Ericsson, Exalt Communications, FWCC, Harris Stratex, Motorola
  - requests operation below minimum bit rates for brief intervals (as during fades) if:
    - complies with minimum during normal operation
    - complies with minimum on average
- FCC indicated rulemaking is required, says NPRM in works
- FWCC filed request for waiver pending rulemaking (May 14, 2010).

## Stack Adjacent Channels at 6, 11 GHz

- Maximum Fixed Service channel bandwidth is 30 GHz (lower 6 GHz), 40 MHz (11 GHz)
  - operators foresee need for wider channels for broadband backhaul
- FWCC requested rule change to combine adjacent pairs of 30 or 40 MHz channels (filed May 14, 2010)
  - would allow use of 56 MHz radios deployed in Europe.

## Federal/Non-Federal Sharing

- ❑ Fixed spectrum below 10 GHz is congested
  - (higher frequencies subject to rain fade)
- ❑ No additional spectrum for long-haul broadband backhaul
- ❑ FWCC requested rule change to allow non-Federal sharing in the Federal 7125-8500 MHz band (filed March 16, 2010)
  - similar to present sharing in the 23 GHz band
  - FWCC requested automated database to allow for fast frequency coordination, conditional licensing.

## 3650-3700 MHz Interference Rules

- Novel rules:
  - “do-it-yourself” frequency coordination on line
  - equipment must use contention-based protocol
  - licensees “expected to” cooperate if interference occurs
- FCC refused to intervene in recent interference dispute
- FWCC requested rule change (filed April 15, 2010) – licensees “must” (not “should”):
  - examine database before operating
  - choose parameters to minimize interference
  - cooperate to resolve problems.

## Request for Earth Station Audit

- ❑ FWCC asked for audit requiring earth station licensees in shared FS/FSS bands to certify construction and location (filed Nov. 26, 2008)
  - eliminates need to coordinate with nonexistent earth stations
  - modeled after successful private land mobile audits
- ❑ Follows similar FWCC requests in 2002, 2004
- ❑ FCC has requested meeting.



## Automated 23 GHz Coordination

- ❑ FWCC is considering a request for rule change to automate Federal/non-Federal coordination process
- ❑ Entails non-Federal access to database of Federal usage
  - allows coordinators to quickly confirm usability of a proposed path
  - enables conditional licensing throughout 23 GHz band.

**Thank you!**

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