2005-03-15



# License-Exempt Task Group Meeting Minutes

IEEE 802.16 Session #36 – Atlanta GA

## Tuesday March 15, 2005, Morning Session 0800-1200

Meeting called to order at 08:13 by the Chair – Mariana Goldhamer.

### Agenda

Agenda updated and approved by unanimous voice vote.

## Selection of Secretary

Barry Lewis volunteered to act as secretary for this session.

# Selection of Editor

No volunteers came forward – however it was noted that the need for an editor is becoming more urgent as contributions to the group increase.

### Attendance

The participants were:

- Mariana Goldhamer, marianna.goldhammer@alvarion.com
- Barry Lewis, blewis@redlinecommunications.com
- Andy Sago, andy.sago@bt.com
- Remi Chayer, rchayer@wavesat.com
- Al Wieczorek, al.wieczorek@motorola.com
- Scott Seidel, sseidel@raytheon.com
- Jim Carlo, j.carlo@ieee.org
- Terri L Brooks, terri.brooks@charter.net
- Jeff Poston, jdposton@mitre.org
- Steve Kuffner, kuffner@labs.mot.com
- Joanna Guenin, jiguenin@motorola.com
- Mark Austin, mark.austin@ofcom.org.uk
- Paul Piggin, ppiggin@cygnuscom.com
- Yang Yu Ren, yryang@itri.org.tw
- Lee Chi-Chen, jjlee@itri.org.tw
- Avi Freedman, avif@hexagonltd.com
- Charles Rush, crush@tmgtelecom.com
- Darcy Poulin, dp@sige.com
- Chris Hansen, chris.hansen@intel.com
- Charles Cook, charles.cook2@qwest.com
- Hong Liu, hongliu@microsoft.com

# Reviewing output from last meeting.

The chair reviewed the output from the last meeting (802.16h-05\_002.pdf).

# **Contribution Presentations:**

### C802.16h-05/007 – FCC announcement on 3650-3700MHz

Light licensing and high power proposals noted. Reference to "contention based" protocols noted and at an appropriate time, we may need to work with 802.18.

# C802.16h-05/004 - General Architecture: Shared Radio Resource Management

Contribution presented by Mariana Goldhamer. An example of a "policy" for dealing with potential interference issues.

Over the air network communication possible when the same PHY mode is used. IP level communication might be effective when different PHY's in use.

# *Comment: Contributions invited on any security issues associated with "advertising" IP addresses.*

Inter-BS communication proposals noted in 802.16g.

Contribution accepted for inclusion in the working draft document 002.

# C802.16h-05/005r1 - Fairness Criteria and Interference Avoidance

Contribution presented by Mariana Goldhamer.

The paper presents criteria for fairness in spectrum sharing and shows the possibility to achieve interference-free operation, through appropriate traffic scheduling, power control and transmission angle control. It discusses allocation of time scheduling to identify "interference free" periods for each network within an area. In addition the contribution explores the possibility of utilizing the spectrum resource in a more efficient manner for areas where interference to the "master" network in that period is not likely.

Definition of a common policy is required. Power reduction is important and key. Splitting in the OFDMA sub channelisation domain needs further examination.

Contribution accepted for inclusion in the working draft document. "Fairness Criteria" chapter.

# S802.16h-05/006 - Proposals for facilitating co-channel and adjacent channel coexistence in 802.16 LE

Contribution presented by Chi-Chen Lee from ITRI.

Nationwide database along with a BS start up procedure proposed as a means to facilitate coexistence. The proposed database would be secure helping the IP address security matter raised earlier.

- Unresolved questions about who would administer such a database and how the information can be used.
- Regional database may be preferable.
- Not clear about the advantages compared to scanning the channels. However it may be possible that the interference potential of an adjacent network may be missed. Subscriber stations may "know" more about the environment.

Meeting adjourned at 11:55

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### Afternoon Session 13:30 -18:00

Meeting re-convened at 13:42

Contribution 05/006 continued:

During the initialization phase:

• Proposes a coexistence zone as the last burst in the DL frame. To allow SS to associate correctly with the BS in the presence of a potentially interfering BS or SS

During normal operation:

- UL /DL interleaving does not remove all interference cases.
- BS completely turned off in alternate transmission periods throughput reduction.
- Sub-channel splitting PHY dependant.
- DL/UL interference zones in transmission timing.

The meeting agreed that this presentation identified good topics for the working document. The meeting agreed that the slide material should be turned into text proposals for the working document. The authors agreed to progress.

### Creating a working document

The chair undertook to produce the first draft of a working document based on the Table of contents document 002r1 and the contributions reviewed in this meeting.

### **Updating Call for Contributions**

Updated to reflect content and discussion to date doc IEEE 802.16-05/007 refers.

Motion to close from Al Wieczorek, no opposition.

Meeting closed at 16:30

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Meeting reconvened at 14:15

# **Drafting the Initial Table of Contents**

A draft table of contents was compiled based upon the contributions to date and the morning session discussion.

Output document 802.16h-05 002.

# **Call for Further Contributions**

The call for contributions at the next meeting can be based on the draft table of contents developed at this meeting.

#### Motion

Motion to adjourn the meeting put forth by: - Andy Sago Motion seconded by: - Barry Lewis Discussion: - None Vote Method: - Verbal Vote Results: Unanimous voice vote. - Motion carried by unanimous vote.