License-Exempt Task Group Meeting Minutes – Session #41

IEEE 802.16 Session #41 – Delhi, India

Chair: Mariana Goldhamer, Alvarion
Vice Chair: Barry Lewis, Redline Communications (Absent)
Editor: Xuyong Wu, Huawei

Tuesday 10 January 2006

First session: The meeting opened at 1:20pm.
ITC Maurya Sheraton Hotel and Towers
New Delhi

Paul Piggin is to act as secretary.

1. Opening of the LE TG Sessions

Planned sessions:

Tuesday 10 January: 1pm-6pm
Wednesday 11 January: 1pm-6pm
Thursday 12 January: 1pm-6pm

2. Revision and approval of the LE TG Agenda

The agenda was discussed and finalized accordingly:

1. Opening of the LE TG Sessions.
2. Revision and approval of the LE TG Agenda.
3. Approval of the Minutes for Session #40 – doc. IEEE 802.16h-05/026.
4. Input contributions discussion and approval.
   - Accept two late contributions: C802.16h-06/007, C802.16h-06/008.
5. Editorial issues – Shawn Wu.
6. CTS Ad-Hoc – John Sydor.
7. Order of presentation:
   - C802.16-06/005r1 – Considerations on profile issue.
   - C802.16-06/008 – Interference scenarios in 2.4GHz and 5.8GHz UNII band.
   - C802.16-06/006 – Community definition.
   - C802.16-06/003 – CTS Usage in Sync Ad-Hoc networks.
   - C802.16-06/001 – Technical and editorial amendment of 802.16-2004.
   - C802.16-06/004r1 – Initialization scenario case study on interference situation.
   - C802.16-06/009 – Discussion on inter working between frame structure, co-existence procedures, and credit tokens based scheduling mechanisms (same as C802.16-06/002r1, with the exception of the title).
   - C802.16-06/007 – Comments on the Working Document – Session #41.
8. Elements for the next Call for contributions.
9. A.O.B.
10. Close the meeting.

The agenda was approved by unanimous voice vote.

3. Approval of the Minutes for Session #40 – IEEE 802.16h-05/026

The minutes for last meeting at session #40 were approved no objection.

4. Input contributions discussion and approval

The order and grouping of presentations was discussed.

There was no objection to accepting late contributions C802.16h-06/007, C802.16h-06/008.

5. Editorial comments on the working draft – Shawn Wu

Roger Marks noted that figures included in the working document should be understandable when printed in black and white. Authors are asked to resubmit figures using black and white styling only.

6. CTS ad hoc update - John Sydor

John reported that there was a productive discussion over email since session #40 on issues related to the CTS.

7. Contributions

The following contributions were presented:

Consideration on the profile issue in coexistences

Wu Xuyong, Zhao Quanbo, Pan Zhong
Huawei
Qu Hongyun
ZTE
Dong Xiaolu
CATR

Contribution: IEEE C802.16h-06/005r1

This contribution discussed the idea of including a single system profile for simplification of co-existence.

The meeting recognized the issues presented and broadly accepted the idea of a single profile. Discussion of the outcome was deferred to be considered at the end of the block of four contributions. The block of four contributions are: IEEE C802.16h-06/003, IEEE C802.16h-06/004r1, IEEE C802.16h-06/005r1, and IEEE C802.16h-06/006.

Interference scenarios in 2.4GHz and 5.8GHz UNII band

Marianna Goldhamer
Alvarion

Contribution: IEEE C802.16h-06/008

The scope of this presentation was to define the scenarios in which interference between cells can cause disruption in service. The target frequencies are 2.4GHz and 5.8GHz LE band, according to UNII rules.

This contribution was for information only. This contribution will be revised for addition as an annex to the working document.

Consideration on the community definitions
Wu Xuyong, Pan Zhong, Zhao Quanbo,
Huawei

Contribution: IEEE C802.16h-06/006

Based on the previous meeting and discussion, it is felt necessary to separate and refine the concept of community into several distinguishing terms. These terms should be used precisely in different cases.

Discussion of the outcome was deferred to be considered at the end of the block of four contributions. The block of four contributions are: IEEE C802.16h-06/003, IEEE C802.16h-06/004r1, IEEE C802.16h-06/005r1, and IEEE C802.16h-06/006.

CTS usage in Synchronized IEEE 802.16h Ad Hoc Networks
John Sydor, Shanzeng Guo
Communication Research Center

Contribution: IEEE C802.16h-06/003

This contribution considers recommended changes to the Working Document - IEEE 802.16h-05/027

~ ~ ~ The meeting adjourned at 3:40pm ~ ~ ~

~ ~ ~ The meeting reconvened at 4:05pm ~ ~ ~

Continuation of presentation and discussion of IEEE C802.16h-06/003.

~ ~ ~ The meeting adjourned at 6:05pm ~ ~ ~

Wednesday 11 January 2006

Second session: The meeting opened at 1:20pm.

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Continuation of presentation and discussion of IEEE C802.16h-06/003.

Discussion of the outcome was deferred to be considered at the end of the block of four contributions. The block of four contributions are: IEEE C802.16h-06/003, IEEE C802.16h-06/004r1, IEEE C802.16h-06/005r1, and IEEE C802.16h-06/006.

Initialization scenario case study on interference situation

Wu Xuyong, Zhao Quanbo, Pan Zhong
Huawei

Contribution: IEEE C802.16h-06/004r1

This contribution considered the interference condition between Initializing Base Station (IBS) and the operating radio network near to the IBS. There are several possible scenarios to consider. It is expected that study of these cases may be helpful for development of the amendment and enable the working document to be better understood by the working group.

In addition definitions for ICTS (Initialization CTS) and OCTS (Operational) CTS and the parameters used were discussed.

Discussion of the outcome was deferred to be considered at the end of the block of four contributions. The block of four contributions are: IEEE C802.16h-06/003, IEEE C802.16h-06/004r1, IEEE C802.16h-06/005r1, and IEEE C802.16h-06/006.

Technical and editorial amendment of 802.16-2004 facilitating license-exempt and uncoordinated band operation

Paul Piggin
Cygnus Communications

Contribution: IEEE C802.16h-06/001r1

Contribution accepted-modified. The modifications are:

- Retain section 1.1 and 1.2 as deleted by the contribution.
- Table 1, PHY column: the text should be ‘Section 8’ and not ‘[8.2, 8.3, or 8.4] and/or 8.5’.
- Diagram on page 6 needs to be black and white.

Contribution IEEE C802.16h-06/001r2 was created based on the accept-modified resolutions and uploaded for the editor’s attention.

~ ~ ~ The meeting adjourned at 3:45pm ~ ~ ~

~ ~ ~ The meeting reconvened at 4:10pm ~ ~ ~

Discussion on inter working between frame structure, co-existence procedures, and credit tokens based scheduling mechanisms

David Grandblaise
Motorola Labs

Contribution: IEEE C802.16h-06/009

This document addresses the possible inter working between the existing frame structure, co-existence procedures, and credit tokens based scheduling mechanisms currently described in the working draft document.

The presenter was seeking information and clarification from the group. The feedback from the group indicated that splitting the allocations in the OFDMA domain is acceptable when similar OFDMA PHYs and profiles are used.

Comments on the Working Document – Session #41

Mariana Goldhamer
Alvarion

Contribution: IEEE C802.16h-06/007

The scope of this presentation was:

- High-level view of requirements.
- High-level view of achievements.
- Identification of areas for more work.
- Basis for discussion and agreement of what should be done.
- Eventual task assignments.

This contribution was to provide information to the group.

~ ~ ~ The meeting adjourned at 6:20pm ~ ~ ~

Thursday 12 January 2006

Third session: The meeting opened at 1:15pm.
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An ad hoc meeting activity in the morning of Thursday 12 January 2006 proposed a number of high-level definitions. The definitions, given below, were discussed and accepted with no objection by the group. These definitions will be added to the revised working document.

Interference Neighborhood: Interference neighborhood is relative to a systems (BS and its subscribers). A system (BS and its SSs) will perceive as interference neighbors, all other systems (BSs and their SSs) which creates/receives interfere to/from it.

Community: Is composed of those systems (BSs and their SSs) which coordinate to resolve their interference.

Coexistence Community: Is composed of those systems (BSs and their SSs) which have resolved their interference and coexist.

As previously noted four contributions with deferred resolutions. These contributions were considered en block at this point in the meeting due to their strong relationship and similarity. The contributions are: IEEE C802.16h-06/003, IEEE C802.16h-06/004r1, IEEE C802.16h-06/005r1, and IEEE C802.16h-06/006.

Firstly contribution IEEE C802.16h-06/003 was discussed. Within the task group a new document was created containing a resolution of modified text from the discussion. This is contribution IEEE C802.16h-06/010r1. The meeting accepted the late contribution and with no objection the contribution was accepted to be added to the working document.

~ ~ ~ The meeting adjourned at 3:15pm ~ ~ ~

~ ~ ~ The meeting reconvened at 4:00pm ~ ~ ~

Subsequently, contribution IEEE C802.16h-06/005r1 was discussed and with no opposition the contribution was accepted. The resolution also resulted in the following statement from the task group:

> *If a mechanism for interference resolution is based on messages which include data or control information which can be transmitted only between systems using the same PHY then such description shall be limited to the chapter 'Same PHY profile'.*

Contribution IEEE C802.16h-06/006 was discussed. With no objection the contribution IEEE C802.16h-06/006r1 was accepted to be added to the working document.

Contribution IEEE C802.16h-06/004r1 was discussed and with no opposition the contribution was accepted to be added to the working document.

7.1 Meeting report out

The chair reviewed with the group the report out for the working group closing plenary. This is document IEEE 802.16h-06_002.

8: Elements for the next Call for contributions

Topics to be clarified as part of the call for contributions for the next session were discussed. The outcome of this discussion produced the following which will be presented at the chair's closing plenary report out.

- Solution for entering a community over the air.
- Definition of the process for Adaptive Channel Selection.
- Communication using the Coexistence Time Slot.

- Possibility of BS-BS communication over the air.
- Default value for the “same MAC Frame duration”.
- Coexistence with preferred spectrum users, such as “wireless microphones” and “emergency systems”.

9. AOB

There was no other business.

9.1 Review of draft minutes

The meeting reviewed the draft minutes.

10. Close the meeting

Motion: To adjourn
Proposer: John Sydor
Second: David Grandblaise

~ ~ ~ The meeting closed at 6:00pm ~ ~ ~