

IEEE 802.16h-05/011**License Exempt Co-existence Meeting Minutes**

IEEE802.16 Session 37 – Sorrento Italy

Tuesday May 5, 2005, Afternoon Session 1400-1600

Meeting called to order at 1400

Agenda

Agenda updated and approved by unanimous voice vote.

Selection Secretary

Mr Nader Zein elected as secretary.

Selection of Editor

Mr Xuyong Wu elected as Editor.

Attendance

The participants were:

- Marianna Goldhammer, marianna.goldhammer@alvarion.com
- Barry Lewis, blewis@redlinecommunications.com
- Andy Sago, andy.sago@bt.com
- Al Wieczorek, al.wieczorek@motorola.com
- Jim Carlo, j.carlo@ieee.org
- Paul Pigginn, ppiggin@cygnuscom.com
- Reza Arefi, reza.arefi@intel.com
- Xuyong Wu, wuxuyong@huawei.com
- Robin Zheng, robin@huawei.com
- Ching-Tarng Hsieh, chsieh@itri.org.tw
- Huang Keng-Ming, Lucien@itri.org.tw
- Lin Han-Chiang, johnnyitu@itri.org.tw
- Luciano Capo, Luciano.capo@ericsson.com
- Heinz Lycklama, Heinz@osta.com
- Aik Chindapol, aik.chindapol@siemens.com
- Max Riegel, maximilian.riegel@siemens.com
- Huang I Hsiu, roniahuang@itri.org.tw
- Roger Marks, marks@nist.gov
- David Grandblaise, david.grandblaise@motorola.com
- Lucy Chen, chenyuehua@huawei.com
- Nader Zein, nader.zein@ttd.neceur.com

Reviewing output from last meeting.

The chair reviewed the output from the last meeting (802.16h-05_010.pdf).

Contribution Presentations:

C802.16h-05/008r1 – Proposal for 802.16h general operating principles

The contribution presents Proposal for operation principles in conjunction with Data Base and a Coexistence Protocol.

Comment

It was noted that Database is central to the operation of this protocol.
It was noted that the cooperation of service providers to make such information available is needed.

During the discussion the following was clarified by MG:

- clarified the slot duration for radio signature
- Base Station and SS listen to the radio signature.
- Terminal which could not receiver the signature signal is not subject to interference.
- The SS will inform the BS about other BS that are potential interferes which will the negotiate mitigating level interference.

It was also noted that there may be issue with initialization of BS when database information are not available.

Still open issue the coordination of the work of IEEE 802.16h with other groups and regulators. Will be further discussed during following sessions.

Size of the community and hence the database is still an open issue.

Contribution accepted for inclusion in the working draft document 010.

C802.16h-05/0011r1 – Storage of identification information and Coexistence Protocol

Contribution presented by Hung-Chiang Liu.

The paper proposes the architecture of storage of identification information and Coexistence Protocol

Comment

The need for 2 databases was clarified.

The CIS is clarified as the interface which is used to exchange information between databases.

On the use of UDP/TCD, ITRI is using TCP at this moment, since a transport mechanism is not developed. There was Concern that TCP takes long time to transport messages. It was clarified that the scope of this PAR to amend IEEE802.16-2004 standard for fixed application only.

It is agreed to accept all the content in section 9 of this contribution for inclusion in the working draft document, however the security part and the message formats will have an editorial note indicating that this is a temporary text adopted from contribution C802.16h-05/11r1 and is subject to further discussion.

A call for comment from security experts is open to comment on this text.

C802.16h-05/009 - Elements of a Coexistence Protocol

Contribution presented by Mariana Goldhammer.

This contribution proposes messages and basics for a Coexistence Protocol and security considerations.

Agreed to add section 3.1 of this contribution to the appropriate section on the protocol in the working document.

Agreed to add section 3.2.1 on message content of this contribution to the corresponding sections of the working document with editor note added to indicate that this is to be reviewed by experts on security.

Agreed to add section 3.2.2 of this contribution into the working document.

Agreed to adopt all sections starting from 3.3 to end of this contribution into the working document with an editorial note added calling for comments.

C802.16h-05/012r1 - General Architecture for Inter-network Communication Across 802.16 LE Systems

Contribution presented by Keng-Ming Huang.

The contribution presented 3 different solutions. The 1st 2 are based on Radius. The 3rd uses 3rd party trust agent.

Comments

There was concern about the use of Radius server. The main concern is that a computer could spoof the system to believe it is a base station hence requesting more sub-frames and stealing airtime.

Mariana noted that WISP in US wanted flexibility in re-deploying AP.

It was noted that solution 1 of this contribution is already agreed to be included in the standard with the added note calling for comments.

It was noted that the adopted solution in the working document should allow optional algorithms and protocol securities.

C802.16h-05/010 - Market based policies for channel access coexistence in 802.16 LE

Contribution presented by David Grandblaise

This contribution Discusses market based policies for channel access coexistence in 802.16 LE. It also introduces the concept for master and slave network for provisioning interference free period of the LE band.

It was assumed that FCC may not see a problem with this type of policies where there is charge for License band.

It was commented that this could be similar to online trading adopted by the US and UK.

There was concern with adopting such policies in IEEE standard due the need to cover multiple regions.

It was suggested to postpone decision on this until it has been analyzed and obtaining feedback from regulators. The contributor may provide additional information for the next meeting. Others are welcome to also give their comments. This was agreed.

Meeting adjourned at 1900

Wednesday May 4, 2005 Afternoon Session 1400 -1600

Meeting re-convened at 1410.

Mariana presented Agenda for this session as follows:

- FCC R&O on 3.65 GHz and the Contention Base Protocol
 - Presentation on 802.16 and CBP
 - Letter to FCC through 802.18
- 802.11 SG for 3.65 GHz
 - 802.11 presentation on scope
 - Update on teleconferences
 - Presentation on 802.16 and the contention based protocol
 - Proposal for 5 Criteria
 - Letter from 802.16h

Participant:

- Mariana Goldhamer, marianna.goldhammer@alvarion.com
- Barry Lewis, blewis@redlinecommunications.com
- Andy Sago, andy.sago@bt.com
- Nader Zein, nader.zein@ttd.neceur.com
- Al Wieczorek, al.wieczorek@motorola.com
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- Huang Keng-Ming, Lucien@itri.org.tw
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- Heinz Lycklama, Heinz@osta.com
- David Grandblaise, david.grandblaise@motorola.com
- Reudink Doug, doug@adaptix.com
- Mike Lynch, mjlynch@nortel.com
- Les Eastwood, les.eastwood@motorola.com

Mariana presented FCC R&O on 3.6 GHz and the Contention Base Protocol.

It also showed an example in which it illustrates the problem with Clear Channel Assessment protocol for coexistence between 802.11 and 802.16.

FCC feedback on proposed coexistence protocol based on scheduling.

Proposed protocol to FCC requires “type approval” to avoid stealing of radio resources.

Contention based coexistence not suitable for 802.16
FCC can accept scheduled based protocol.

Action:

- Letter to 802.11 SG on 3.6GHz
- Letter to FCC that the CBP is not suitable to 802.16
 - Ask to change the name to “Coexistence Protocol”

Comments:

It was clarified that the creation of an independent JPT and concern with how to practically create such group.

Mariana noted that creation of WG is not sufficient by itself.

Jim proposed that 802.18 should be looking at the coexistence protocol as an independent WG.

Michael Lynch noted that 802.18 usually meet at the 802.11 and 802.15 WGs meeting due to administrative and financial reasons.

Mariana presented 80211-05/223r0 document on 3650 -3700 MHz FCC Action.

Mariana presented 80211-05/331 document – telecom minutes

Mariana presented 80211-05/344 document – telecom minutes 20 April.

Mariana presented 80211-05/351r0 document – SG 5 criteria draft

Noted section 3.a and b where it mentions no other 802 projects covering this band

It is noted 802.20 is not of concern since it is focused on below 3GHz (not covered by this band).

It is noted that a letter should be sent to this SG addressing this issue.

The group agreed on drafting a letter to the 802.11 SG on 3.65 GHz band.

Letter to 802.11 SG on 3.6GHz

Adjourned at 1600

Resumed at 1647

Draft letter C80216-05/14 approved (the letter C appears due to the fact that was not possible to up-load otherwise).

Text for 802.18 consideration to develop a submission to FCC on 3.65 GHz

Draft letter C80216-05_015 was approved ((the letter C appears due to the fact that was not possible to up-load otherwise).

Updating Call for Contributions

A call for comments from security experts is open to comment on the new text added in the working document. (See above)

AOB

Attempt to connect to the 802.11 Conference call.

Motion

Motion to approve the minutes
Unanimous approval of the minutes

Motion

Motion to adjourn the meeting put forth by:
- Barry Lewis
Motion seconded by:
- Mike Lynch
Discussion:
- None
Vote Method:
- Verbal
Vote Results: Unanimous voice vote.
- Motion carried by unanimous vote.
Closed 19:10
