IEEE 802.16 TGm Minutes (DRAFT) Session #54, Orlando Florida

IEEE 802.16's Task Group m (TGm) held its seventh session during the IEEE 802.16 Session #55 in The Caribe Royal Hotel, Orlando, Florida, USA, part of the IEEE 802 LMSC plenary meeting. The session was chaired by Brian Kiernan, with Vice Chair Carl Eklund acting as secretary.

1) Monday, March 17, 2008

The Chair called the meeting to order at 4:42 PM, and the officers were introduced.

The five slides included within <u>http://standards.ieee.org/board/pat/pat-slideset.ppt</u> were shown and the patent policy information was provided to the task group. The chair provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) that the participant believes may be essential for the use of the standard; No responses were recorded to the chair's call.

The chair presented a proposed agenda:

Motion: To approve the agenda as captured in IEEE 802.16m-08/012r1 with the addition of an evening session on Monday evening if meeting space can be found.

The agenda was approved without objection

The minutes from Session #53, IEEE 802.16m-08/008, were presented. The chair asked for any comments and corrections to the minutes. There were none.

The TGm minutes of Session #53 were approved with no objection

The group commenced with resolution of comments received on the EMD document, IEEE 802.16m-08/004.

Resolution of EMD comments are captured in IEEE 802.16-08/11r1.

The comment resolution ended at 16:59

Phil Barber presented the frame structure rapporteur group outcome captured in contribution IEEE C802.16m-06/118r1.

The group proceeded with resolution of comments received against said document. The resolutions of the comments received on IEEE C802.16m-06/118r1 are captured in IEEE C802.16m-08/247.

The group took a recess at 18:06 for dinner

The session resumed at 20:12 The group resumed resolution of comments against IEEE C802.16m-06/118r1.

Recess at 22:06

2) Tuesday, March 18, 2008

TGm and TGj joint session (Chaired by Brian Kiernan and Mitsuo Nohara. The minutes were taken by Peiying Zhu)

Meeting started at 8:08am.

Rakesh Taori presented the 16jm Relay ad-hoc report (C802.16m-08/242).

There were discussions on the proposed SDD text (slide 8 of C802.16m-08/242). Several people voiced their preferences on option 2 with the modification of "relay link" to "link".

There was no objection to adopting the following text into the draft 802.16m SDD.

• A 16m BS that is capable of supporting a 16j RS, shall communicate with the 16j RS in the "legacy zone". The 16m BS is not required to provide 16j protocol support in the "16m zone". The design of 16m relay protocols should be based on the design of 16j wherever possible, although 16m relay protocols used in the "16m zone" may be different from 16j protocols used in the "legacy zone".

There was a long debate on the connection configuration (slide 12 of C802.16m-08/242). Several straw polls were conducted to indicate people's preferences on various link configurations. It was agreed that further discussions are needed to make a final recommendation.

There was no objection to provide .16j RS support in .16m BS as displayed in the top part of Change proposal to SDD Network Architecture diagram (slide 13 of C802.16m-08/242).

There were discussions on what are the next steps. The TGm Chair provided some suggestions:

- 1) Discuss and better define usage scenarios first before deciding on the features and capabilities
- 2) Discuss frame structure on which Relay may impact
- 3) Link network topology to network architecture
- 4) Decide and better define the scopes of usage scenarios
- 5) Decide what features are beneficial to .16m
- 6) Key attributes and their relation to usage model or 802.16m system performance

TG Chairs recommend reconstituting the 16jm Relay ad-hoc group with the following scope:

- 1) Identify any usage model deltas comparing with .16j usage models in some detail, not simply indoor and outdoor
- 2) Definition and terms, such as the definition of .16m MS, .16e MS, .16m RS etc.
- 3) Relay Topology
- 4) Connection (TGj/TGm inter-op) diagram
- 5) Feature list, not attributes

There were no objections to reconstituting the 16jm Relay ad-hoc to address the recommendation, with the same ad-hoc chairs (Rakesh Taori and Peiying Zhu). Adhoc chairs can prioritize the discussion topics.

10:06: Continued comment resolution on comments against IEEE C802.16m-06/118r1. These resolutions are captured in IEEE C802.16m-08/247 12:04 Recess for lunch

13.15: The group resumed comment resolution on C802.16m-06/118r1. The chair announced that a breakout session to finish the comment resolution would be held on Wednesday in room Sierra G from 8:00am to 4pm.

14:02: The group then proceeded to the resolution of comments received against the draft SDD (IEEE 802.16m-08/003) in response to the call for contributions (IEEE 802.16m-08/005).

16:03: Per the agenda, the comment resolution was suspended and the group proceeded to hear the report (IEEE C802.16m-08/203) from the uplink multiple access rapporteur group, presented by Mark Cudak.

18:00 Recess until Wednesday 8:00 am.

3) Wednesday, March 19, 2008

The session resumed at 8:10 with presentations of contributions received in response to IEEE 802.16m-08/005.

Contributions C802.16m-08/120, 121, 122, 123, 135, 139, 153, 160, 172, 174, 193, 194, 205, 213, 214, 215, 220 and 221 on pilot structure were presented by either the submitter or the chair.

The chair asked the group if there were any other contributions that were relevant to the matter. No additional contributions were identified by any of the attendees.

The group then moved on to review contributions on downlink control channels received in response to IEEE 802.16m-08/005. Contributions C802.16m-08/134, 125, 140,148 and 149 were presented.

12:04: The group took a lunch recess until 1:15

13:15: The group resumed the review of the downlink control channel contributions. Contributions C802.16m-08/150, 151, 164, 165, 170, 173, 176, 177, 178, 181, 184, 185, 186, 190, 192, 207, 208, 210, 211, 212, 217, 218, 219 and 221 were presented and discussed.

Recess for coffee 14:50- 15:05

The group continued the review of the downlink control channel contributions. Contributions C802.16m-08/222, 224, 225 were presented and discussed. 223 was withdrawn upon request from the author.

The chair then asked the attendees if anyone had any other contributions that were submitted on time relevant to this topic. No additional contributions were identified by the attendees.

17:34: The chair announced that the breakout Frame Structure comment resolution group had completed their task and the availability of C802.16m-08/118r2, which included those comment resolutions, and announced that it would be reviewed and voted on Thursday afternoon for incorporation into the draft SDD.

The group proceeded to hear presentations of contributions on resource block structure.

18:02: The group took a recess until Thursday morning 8 am.

4) Thursday, March 20, 2008

8:05: The group resumed hearing presentations of contributions on resource block structures. The following contributions were presented: C802.16m-08/126, 152, 172, 175, 180, 187, 188, 196, 200, 202, 209, 217, 226 and 227.

9:55: The group took a recess until 10:15

10:17: The group resumed deliberations and returned to resolving comments against 802.16m-08/003. The comment resolutions were captured in C802.16m-08/009r2.

12:55: The group took a lunch recess until 13:15

13:17: The group resumed resolving comments against 802.16m-08/003.

Motion: To authorize the SDD Editor to update and issue the SDD as 802.16m-08/003r1 based on the comment resolutions contained in C802.16m-08/009r2.

Mover: Sassan Ahmadi Second: Minnie Ho

Motion was withdrawn upon request of the mover.

The chair announced the availability of C802.16m-08/118r3, which corrected a mistake made by the editor. Sassan Ahmadi pointed out some additional errors in the document and corrections were proposed, to which there were no objections.

The chair tasked Ron Murias (the editor) to fix the errors pointed out by Sassan and issue a new version of the document as C802.16m-08/118r4.

Motion: To authorize the SDD Editor to update and issue the SDD as 802.16m-08/003r1 based on the comment resolutions contained in C802.16m-08/009r2 and the adoption of C802.16m-08/118r4 Mover: Sassan Ahmadi Second: Minnie Ho

14: 48 Discussion on motion suspended for a 15 minute recess

15:05 Discussion on motion resumed

Ron Murias proposed a friendly amendment to the motion:

To adopt C802.16m-08/118r4 and authorize the SDD Editor to update and issue the SDD as 802.16m-08/003r1 based on comment resolutions contained in C802.16m-08/009r2 and the material contained in C802.16m-08/118r4

The friendly amendment was accepted by the mover and the seconder.

Motion to amend the motion: Mover: Joerg Schaepperle Seconder: Torsten Fahldieck

Split the original motion into two motions:

Motion 1:

To adopt C802.16m-08/118r4 and authorize the SDD Editor to update and issue the SDD as 802.16m-08/003r1

Motion 2:

Authorize the SDD Editor to update and issue the SDD as 802.16m-08/003r1, based on comment resolutions contained in C802.16m-08/009r2

The proposed amendment was not accepted by the original mover or seconder.

Vote on motion to amend: 8 in favor 59 against **Motion to amend fails**

Vote on original motion: 99 in favor, 16 against. **Motion passes.**

Motion

To adopt OFDMA as the mandatory access method for 802.16m uplink operation Mover: Jose Puthenkulam Seconder: Sassan Ahmadi

A friendly amendment was proposed by Naftali Chayat, to add the Single Carrier (SC-FDM) as an optional access method. The proposed friendly amendment was rejected by the original mover, Sassan Ahmadi.

Motion to amend by Kiran Kuchi, to add the Single Carrier (SC-FDMA) as an optional access method, seconded by Shkumbin Hamiti

In favor :17 Against : 135

Motion to amend: fails

Vote on original motion: In favor: 144 Opposed: 7 **Motion Passes**

Discussions on the way forward:

The chair proposed forming two new Downlink rapporteur groups and presented a draft Charter and Scope (IEEE 802.16m-08/015). There were no objections to this course of action. Note: This draft Charter and Scope was subsequently revised in order to establish a better means of tracking contributions to the Rapporteur groups and reissued as IEEE 802.16m-08/015r1

There was some discussion on the need to start discussions on the MAC design philosophy. The topic will be raised on the TGm reflector and if a need is identified, an official call for comments on identified topics will be issued no later than Session #55.

The group then was given an update on IMT-Advanced issues:

Jose Puthenkulam provided a verbal report on the 802.18 meeting that took place on Tuesday, March 18. The TGm chair presented the current ITU-R WP5D timeline for IMT-Advanced.

Jose Puthenkulam then presented C802.16m-08/256r2 which was a proposed TGm workplan. It was agreed to update the TGm workplan after the next ITU-R WP5D currently scheduled for June 2008.

Motion to Adjourn at 16:54. Mover: Ron Murias Second: Phil Barber Passed with no objections

Meeting adjourned at 16:55.