Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	Session #40 802.16 Mobile Multihop Relay Meeting Minutes	
Date Submitted	2005-12-16	
Source(s)	Mitsuo Nohara MMR SG Chair 10-10, Iidabashi 3-chome, Chiyoda-ku, Tokyo 102-8460, Japan	Voice: +81-3-6678-3599 Fax: +81-3-6678-0279 mailto: mi-nohara@kddi.com
	Jung Je Son 1 <sup>st</sup> - 2 <sup>nd</sup> MMR SG Editor Samsung Electronics Co., Ltd. 416 Maetan-3, Suwon, 442-600, Korea	Voice: +82-31-279-5098 Fax: +82-31-279-5130 mailto: jungje.son@samsung.com
Re:		
Abstract	Meeting Minutes of 2 <sup>nd</sup> MMR SG at Session #40 of IEEE 802.16WG	
Purpose		
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> , including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <a href="mailto:chair@wirelessman.org">mailto:chair@wirelessman.org</a> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> .	

## The Venue was Columbia room at Fairmont Hotel

Meeting was held from 16<sup>th</sup> November, 2005 to 18<sup>th</sup> November, 2005.

## First-Day Meeting

At 8:10, 16th November 2005, the chair of MMR study group, Mitsuo Nohara, called to order of 1<sup>st</sup> day MMR study group session during #40 meeting and notified the update schedule of three days morning sessions.

Chair presented the opening report, 802.16mmr-05/002, including explanation on the second call for contribution on PAR and 5 Criteria and meeting result of the last Taipei meeting.

Chair presented the list of 22 contributions and plan for technical discussion and preparing the PAR and 5 Criteria. Contributions will be categorized to 3 classes, PAR & 5 Criteria, Scope and Scenario and technical presentation.

Chair presented on the future plan of MMR study group expecting closing on #41 meeting with PAR and 5 Criteria and tutorial on MMR on #42 meeting.

Chair was allowed to take pictures during session by unanimous agreement of study group members.

Contribution presentation began from 8:20. Chair said that each technical presentation was expected to take 15 minute for presentation and 5 minute for discussion.

IEEE C802.16mmr-05/020r1 with title "Advantages of a Coexistence Protocol for Relay Operation" presented by Mariana Goldhamer from 8:20.

IEEE C802.16mmr-05/040 with title "Considerations on Mobile Multi-Hop Relay for IEEE802.16" presented by Kenji Saito from 8:48.

IEEE C802.16mmr-05/032 with title "Recommendations for the Scope and Purpose of the Mobile Multihop Relay Task Group" presented by M. Asa from 9:05.

IEEE C802.16mmr-05/024 with title "Self-backhaul Relay" presented Jimin Liu from 9:40.

Coffee break from 9:50 to 10:15

IEEE C802.16mmr-05/026 with title "Recommendation on Mobility Management of Mobile Multi-hop Relay" presented by Den Shiojang from 10:18.

IEEE C802.16mmr-05/030 with title "Military Usage Scenario for 802.16 MMR" presented by D.J. Shyy from 10:32.

IEEE C802.16mmr-05/031 with title "CDMA2000 Network Repeater Deployment Experience" presented by D.J. Shyy from 10:45.

IEEE C802.16mmr-05/033 with title "A Case for Multihop Backhaul" presented by Shyamal Ramachandran from 11:00.

IEEE C802.16mmr-05/041 with title "System Performance of Relay-based Cellular Systems in Manhattan-like Scenario" presented by I-Kang Fu from 11:25.

The scheduled contributions were presented by 11:50 but one deferred because of presenter being unavailable.

 $1^{\rm st}$  day session recessed at 11:50 and it was announced that  $2^{\rm nd}$  day session would resume on 8 o'clock  $17^{\rm th}$  November.

## **Second-Day Meeting**

At 8:10, 17<sup>th</sup> November, 2005, the session was resumed by call of the study group chair.

Chair presented the modified schedule of the second day meeting with the list of 11 contributions.

Contribution presentation was resumed as scheduled from 8:15.

IEEE C802.16mmr-05/042 with title "Cooperative relaying system" presented by Sumeet Sandhu from 8:15.

IEEE C802.16mmr-05/022 with title "Throughput Improvements in Micro-Cellular Multi-Hop Networks" presented by Ozgur Oyman from 8:40.

IEEE C802.16mmr-05/023 with title "Recommendation on 802.16 MMR with Backward Compatibility" presented by Gang Shen from 9:10.

IEEE C802.16mmr-05/025 with title "A frame structure for mobile multi-hop relay with different carrier frequencies" presented by Gang Shen from 9:30.

Coffee break from 9:45 to 10:00.

IEEE C802.16mmr-05/027 with title "Recommendation on PMP Mode Compatible TDD Frame Structure" presented by Fang-Ching Ren from 10:05.

IEEE C802.16mmr-05/028 with title "Open problems in Mobile Multi-hop Relay System" presented by Kyungjoo Suh from 10:25.

IEEE C802.16mmr-05/029 with title "Modification for enabling the RS operations" presented by Tzu-Ming Line from 10:35.

IEEE C802.16mmr-05/038 with title "Decision method of relayed MS in MMR-enabled networking" presented by Aeran Youn from 10:50.

IEEE C802.16mmr-05/034 with title "Analysis of Simple Infrastructure Multihop Relay Wireless System" presented by Byoung-Jo Kim from 11:05.

IEEE C802.16mmr-05/036 with title "Consideration of MMR Basic Networking Topology Constraints" presented by Peiyng Zhu from 11: 55.

2<sup>nd</sup> day session recessed at 12:20 with finishing scheduled contribution presentation except one deferred to 3<sup>rd</sup> day session at 18<sup>th</sup> November. It was announced 3<sup>rd</sup> day session would resume on 8:00, 18<sup>th</sup> November.

## **Third-Day Meeting**

3<sup>rd</sup> day session resumed on 8:15, 18<sup>th</sup> November with presenting the schedule with slot for presentation of 4 contributions and slot for discussion about PAR and 5 Criteria by chair.

IEEE C802.16mmr-05/035 with title "MMR PAR and 5 Criteria Draft" presented by Wen Tong from 8:15.

IEEE C802.16mmr-05/037 with title "Issues and Scope of MMR" presented by Yousuf Saifullah from 8:45.

IEEE C802.16mmr-05/043 with title "Input text to the PAR and Five Criteria" presented by Mike Hart from 9:10.

IEEE C802.16mmr-05/039 with title "PAR and Five Criteria for 802.16 Mobile Multihop Relay" presented by Mitsuo Nohara from 9:35.

Coffee Break from 9:55 to 10:15

Discussion for PAR and 5 Criteria was held.

Motion: to adopt C802.16mmr-05/039 as initial material for drafting PAR and updating based on discussion. Issued by Mitsuo Nohara; Second: Jung Je Son, Approved unanimously.

Discussion on Scope of the Project was held.

The following proposed text got major support:

The subscriber station operating according to existing standard shall be capable of operating with MMR enabled BS with no modification and with an RS with little or no modification. With major support.

Motion: to empower the chair to combine all of proposed text during second MMR SG session and to produce the baseline as draft for PAR and 5 Criteria for consideration at the next session. Proposed by Mike Hart; Second by Jaeweon Cho, passed unanimously.

Motion: to empower the chair to issue the call for contributions and comments on the baseline draft for PAR and 5 Criteria such that they can be considered at the session 41, closed by 6<sup>th</sup> January, 2006. Raised by Mike Hart, Second: J Kim, passed unanimously.

Motion: to empower the chair to ask the WG for extending MMR SG to next plenary at WG plenary. Raised by J Kim, second: Mike Hart, passed unanimously

Motion to adjourn:

Raised by Jonathan Labs, second: Mike Hart, passed unanimously.