Project	IEEE 802.16 Broadband Wireless Access Working Group <**http://ieee802.org/16**>
Title	802.16j Relay Mobility Management-Idle/Sleep ad hoc Conference Call #3 Minutes
Date Submitted	2007-05-4
Source(s)	David Comstock dcomstock@huawei.com Voice: +1 858 735 9382
Re:	IEEE 802.16j-07/007r2: " Call for Technical Comments and Contributions regarding IEEE Project 802.16j"
Abstract	802.16j Relay Mobility Management-Idle/Sleep Adhoc Conference Call #3 Minutes
Purpose	This contribution is submitted for discussion and adoption in 802.16j.
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 <http://ieee802.org/16/ipr/patents/policy.html>, 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 <mailto:chair@wirelessman.org> 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 <http://ieee802.org/16/ipr/patents/notices>.

802.16j Relay Mobility Management-Idle/Sleep Adhoc Conference Call #3 Minutes

Chair: David Comstock
Vice Chair: Yuefeng Zhou

Details of the call:

Date/time: Monday, April 30 : UTC/GMT 23:00-01:00 (2 hours)

Monday, April 23
NA PDT 16:00
NA CDT 18:00
NA EDT 19:00

Tuesday, May 1
China 07:00
Japan/Korea 08:00

Summary:

- Harmonization of contributions 7_245 and 7_205 is complete and proposes a solution for RS obtaining MS sleep information by snooping MR-BS<->MS messages.
  - Harmonized document 7_245r2 was available for this meeting.
  - There was a comment that 7_245 should include 2 conditions for the RS to intercept (snoop) MS sleep messages:
    1. The security model implemented allowed it. This condition is already included in 7_245r2.
    2. The snooping functionality was enabled for the system.

    The issue is that even if the security model allows RS snooping, an implementation should not be required to use it and should be able to use separate MR-BS<->RS signaling as proposed in 7_010.
  - The wording for the additional condition will be worked on off-line.
- 7_010 is the proposed solution for RS obtaining MS sleep information using MR-BS<->RS signaling. If no security model is determined that allows RS snooping of MS messages, then a solution like 7_010 will be used.
- 7_066r3 (RS sleep mode) was available for this meeting. This revision incorporated the two working documents discussed in the previous conference call. The following items were discussed in this meeting:
  - The main case for the proposal made by the proponents is that RS sleep does not break the standard and is useful under certain operational scenarios, where RS power consumption is very important. As a trade-off, RS sleep may result in a lower level of service because the MS may have to wait for the RS to wake up before it can access the system.
  - In the case of handoff, if MS is not served quickly enough, dropped calls would result.
  - For Full sleep mode:
    - How can MSs perform scanning if the RS does not transmit the preamble?
    - It was clarified that's Full RS sleep mode would not be used in systems supporting mobility.
  - For Partial sleep mode:

- In this case, the RS transmits minimal overhead and does not schedule traffic.
- It's not clear if the RS is still listening to the uplink for MS BW requests. This should be clarified, particularly when considering MS handoff.
- There was an issue whether the power savings will be significant if the transmitter is turned on and off regularly. Performance results were requested showing the power savings provided by the proposal.

- 7_262r2 on idle mode for relay networks. The section on Paging has been updated in r2. The new TLV details were provided to allow the MR-BS to tell RSs the paging parameters for paging MSs.

  Fields were added to MOB_PAG-ADV to allow MR-BS and RSs to command subordinate RSs to stop paging a particular MSs. Also, the MR-BS can send MOB_PAG-ADV messages to RSs to synchronize its Page count with RSs so that when the MR-BS stops paging an MS the subordinate RSs will as well.
  - When does an RS send the stop page command?
  - When an RS receives the RNG-REQ from the MS, it will send Stop Page command to its subordinate RSs and forward the RNG-REQ to its superior RSs, which will send Stop Page commands to its other subordinate RSs, if needed.
  - More discussion needed on email list.

Agenda:

1. Roll Call

Last Name:	First Name:	Email:
Chion	Mary	mchion@zteusa.com
Comstock	David	dcomstock@huawei.com
Fong	Mo-Han	mhfong@nortel.com
Lee	Youn-Tai	lyt@nmi.iii.org.tw
Loa	Kanchei (Ken)	loa@nmi.iii.org.tw
Saifullah	Yousuf	yousuf.saifullah@nsn.com
Ward	Lisa	lisa-m.ward@rohde-schwarz.com
Yin	Hua-Chiang	hcyin@nmi.iii.org.tw
Zhou	Yuefeng	Yuefeng.Zhou@uk.fujitsu.com

2. Review of action items

#	Subject:	Action Item
1	7_205	• Proponent of 7_205 to provide motivation for the acknowledgement for the MOB_SLP_RSP case on the [MOB Adhoc] email list. • Proponent of 7_205 to provide sequence diagrams for the sleep scenarios on the [MOB Adhoc] email list.
Status:	• **Closed:**	

#	Subject:	Action Item
2	7_010r6	• All to discuss on the [MOB Adhoc] email list their views on whether this solution

		is needed if RS can snoop MS messages.
Status:	• **Closed**: There are operating scenarios where this solution is needed.	

#	Subject:	Action Item
3	7_066r2	• Proponent of 7_066r2 to respond to the question regarding coordination of RS and MS sleep on the [MOB Adhoc] email list.
Status:	• **Closed**: Proponent provided responses to these questions in 7_066r3	

#	Subject:	Action Item
4	7_262r1	• Proponent to look at 7_004 to see if there are dependencies with this contribution. • Proponent to upload revision with details about the new TLV required for the MR-BS to provide MS paging information to RS.
Status:	• **Closed**: New revision has been provided with more details about the new TLV.	

#	Subject:	Action Item
5	Consideration of other contributions	• The adhoc chair and vice chair will consult with the 802.16j leadership, consider the opinions of the other group members, and consider the amount of time available after the initial contributions are addressed.
Status:	• **Closed**	

3. Review status of contributions deferred from #48

   Please see action item status above.

4. Review of new action items

#	Subject:	Action Item
6	7_245r2	• Determine satisfactory wording for conditional that RS snooping is enabled for the network.

#	Subject:	Action Item
7	7_066r3	• Clarify if RS in partial sleep mode continues to monitor uplink for MS requests. • Determine if quantification of performance improvements will be provided for partial RS sleep considering RS transmitter toggling, etc..

5. AOB

None