

<i>Project</i>	IEEE 802.16j Mobile Multihop Relay Task Group	
<i>Title</i>	MPDU Construction adhoc – Minutes of the third conference call	
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<i>Re:</i>		
<i>Abstract</i>	<i>Minutes of the third conference call of the MPDU Construction adhoc held on April 16 2007.</i>	
<i>Purpose</i>	<i>Information</i>	
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MPDU Construction adhoc: Minutes of the third conference call

Jeffrey Z. Tao
Mitsubishi Electric Research Lab

Minutes of the third Relay TG MPDU construction adhoc conference call

Monday April 16 2007

(13:00 GMT, 8:00 CDT, 9:00 EDT, 21:00 P.R.C/R.O.C, 22:00 Japan)

Chair: Jeffrey (Zhifeng) Tao

Participants:

<i>Kanchei (Ken) Loa</i>	<i>Hang Zhang</i>	<i>Hongyun Qu</i>
<i>Chie-Ming Chou</i>	<i>Mary Chion</i>	<i>Haihong Zheng</i>
<i>Huaqiang Lee</i>	<i>Youn-Tai Lee</i>	

The meeting was started at 13:00 GMT on April 16 2007 and chaired by Jeffrey Z. Tao. The meeting continued the discussion and successfully formed a preliminary recommendation for each contribution.

1. Roll call

Roll call was conducted at the beginning of the adhoc and participants listed above were identified.

2. Contribution discussion and recommendation preparation

1. 07/198r7

- a. *H. Zheng* agreed with *M. Chion* that the value of CID is not sufficient to distinguish a relay MAC header from a GMH. A more detailed discussion was conducted on the adhoc group email list before this teleconf.
- b. *J. Tao* raised the question of whether 'RSV' bit or 'mesh subheader' bit should be used to indicate the relay MAC header.
- c. *K. Loa* explained the necessity of extending 'LEN' field, and further supported to use 'mesh subheader' bit to indicate the relay MAC header.
- d. *M. Chion* agreed that using 'mesh subheader' bit could make the relay MAC header design cleaner.
- e. *M. Chion* further suggested submitting a comment to 16d/Cor 2 to clarify the usage of 'mesh subheader' bit in MMR network.
- f. *The participants of the teleconf agreed to recommend the TG to accept an updated version of 07/198r7 into the baseline.*
 - i. *The contribution update referred to hereby should reflect the consensus that 'mesh subheader' bit will be used to indicate the relay MAC header.*
 - ii. *Also, comment will be submitted to 16d/Cor 2, clarifying the usage of 'mesh subheader' bit in the MMR environment.*

2. 07/195r3

- a. *H. Zhang* first provided a brief overview of this contribution.
- b. *H. Zhang* further confirmed that the proposed routing method and associated subheader format would be an optional feature.

- c. *H. Zheng* wanted to confirm whether the routing based upon the destination RS CID was a kind of tunneling method, and could be used as an alternative to tunneling.
 - d. *H. Zhang* explained that the proposed routing method can be applied on anything outside a tunnel.
 - e. *H. Zhang* argued that the content of the proposed QoS subheader has not been clearly defined in this contribution so far. Moreover, if the proposed QoS subheader only has 8 bits, it would not have sufficient space to convey QoS requirement (e.g., max rate, delay, etc.). Given limited QoS information, it will be difficult for the scheduler to make any meaningful decision. On the other hand, if the proposed QoS subheader provides adequate space for all necessary QoS information, significant overhead would result.
 - f. As a reply, *H. Zhang* explained that this proposal was meant for the connectionless QoS routing and control. It can eliminate the need of populating and storing QoS requirement information on each and every intermediate RS.
 - g. Given the fact this contribution also has implication on routing, *J. Tao* solicited opinion from the adhoc group as to how to handle this contribution in a proper way.
 - h. *K. Loa* mentioned that the proposed subheader mechanism may have security implication.
 - i. *H. Zhang* argued that security is more of a problem pertaining to general 802.16 design methodology, rather than related to this contribution in particular.
 - j. *M. Chion* mentioned that signaling MAC message is not protected, and suggested to follow the same design principle for MMR MPDU format.
 - k. Both *M. Chion* and *H. Zheng* confirmed that the CID in 6.3.3.8.2 of the current baseline document (r3) refers to MS CID.
 - l. *The participants of this teleconf suggested the authors to split the contribution into several separate ones, each of which focuses on just one topic (e.g., routing, subheader design, etc.).*
3. 07/217r1
 - a. *The authors will resubmit an update of this contribution to the TG.*
 4. 07/256
 - a. *J. Tao* confirmed with the authors (i.e., *K. Loa*) that no confusion will be caused to MS.
 - b. *H. Qu* mentioned that no fragmentation can be applied on basic CID.
 - c. *K. Loa* clarified that no fragmentation was proposed in this contribution.
 - d. *M. Chion* proposed to use a 16j specific broadcast CID instead of a multicast CID in the header in order to reduce the overhead associated with multicast group establishment and maintenance.
 - e. *K. Loa* replied that only multicast scheme is considered at this moment.
 - f. *The participants of this teleconf agreed to recommend the TG to accept this contribution into baseline, if K. Loa can address the comments by M. Chion.*
 5. 07/257
 - a. *The participants of this teleconf agreed to recommend the TG to accept this contribution into baseline.*
 6. 07/267r2
 - a. *M. Chion* provided a brief summary of this contribution, and explained that section 3.3.26 (page 93) of current baseline draft (r3) has implicitly specified the notion of source routing, and thus covered the essence of this contribution. Nonetheless, 07/267r2 further proposes some clarification.
 - b. *H. Zhang* asked whether subheader is used for source routing.

- c. *H. Zheng* confirmed with *M. Chion* that the notion of “hop-by-hop” tunneling in the previous version of this contribution has been completely dropped.
- d. *M. Chion* further clarified that CID encapsulation in the current baseline draft (r3) is only described in the systematic CID assignment section. 07/267r2 extended CID encapsulation scheme to an arbitrary CID assignment scheme and also provided further clarification to the scheme.
- e. *The participants of this teleconf agreed to tentatively recommend TG to accept this contribution into baseline. Nonetheless, given the fact little time has been given to the participants to review this new update, the recommendation of acceptance could be revised per request/comment from the adhoc members.*

7. 07/285

- a. *The participants of this teleconf agreed to recommend TG to accept this contribution into baseline.*

3. Action items

Roll call was conducted at the beginning of the adhoc and participants listed above were identified.

- a. Authors of 07/198 shall address the comments raised during this teleconf and upload an update of the contribution.
- b. *H. Zheng* would provide submit a clarification to section 6.3.3.8.2 in current baseline (r3), if necessary.
- c. *M. Chion* will email the comments regarding 07/256 to the adhoc group mailing list for *K. Loa* to address.