# **P802.16h to RevCom: Conditional Approval**

19 March 2010

# Rules

- LMSC OM Clause 14: Motions requesting conditional approval to forward where the prior ballot has closed shall be accompanied by:
  - Date the ballot closed
  - Vote tally including Approve, Disapprove and Abstain votes
  - Comments that support the remaining disapprove votes and Working Group responses.
  - Schedule for confirmation ballot and resolution meeting.

### Date the Ballot closed: 7 February 2010

Stage	Open	Close		
Sponsor Ballot	06-Aug-08	05-Sep-08		
Sponsor Ballot Recirc #1	04-Dec-08	25-Dec-08		
Sponsor Ballot Recirc #2	10-Apr-09	25-Apr-09		
Sponsor Ballot Recirc #3	10-Aug-09	25-Aug-09		
Sponsor Ballot Recirc #4	8-Sep-2009	20-Sep-09		
Sponsor Ballot Recirc #5	21-Oct-2009	5-Nov-2009		
Sponsor Ballot Recirc #6	16-Dec-09	05-Jan-10		
Sponsor Ballot Recirc #7	26-Jan-10	07-Feb-10		

# Vote tally including Approve, Disapprove and Abstain votes

- After Recirc. 7:
  - Approve: 104
  - Disapprove: 6
  - Abstain: 7
  - Return ratio: 86.5%
  - Approve ratio: 94.5%

# Comments that support the remaining disapprove votes

4 <sup>1</sup>	Circ D7a	Recirc 1 D8	Recirc 2 D9	Recirc 3 D10	Recirc 4 D11	Recirc 5 D12	Recirc 6 D13	Recirc 7 D14
Chindapol, Aik	0	0	4	0	0	0	0	0
Labs, Jonathan	0	0	0	0	0	0	0	0
Murias, Ronald	0	0	0	0	0	0	0	0
Myles, Andrew	0	0	0	0	0	0	0	0
Piggin, Paul	0	1	0	0	0	0	0	0
Wang, Lei	0	0	0	0	0	0	0	0

# **Status of Disapprove Votes**

- Chindapol: No response; emails bouncing
- Labs: Email intent to vote Approve (15 Jan 2010) after last comments
- Murias: Email intent to vote Approve (18 March 2010)
- Myles: Email of satisfaction with resolution of comment (18 Nov 2009)
- Piggin: No response since 18 Aug 2009
- Wang: Intent to vote Approve recorded in minutes (18 March 2010)

# Comment B46 by Aik Chindapol

Type Technical Part of Dis Satisfied Page 20 Line 25 Fig/Table# Subclause 6.3.2.3.64

#### • Comment

 I could not find any comment in the previous resolution of Sponsor Ballot's recirculation http:// ieee802.org/16/docs/08/80216-08\_065r5.pdf that suggests addition of this new sub-clause on coexistence Forward Acknowledge Message. It looks like this is out of scope of the recirculation. Technically, the use of CX-FWG-ACK is redundant and causes additional delay. The exchange sequence of CX-FWD-REQ and CX-FWD-RSP is consistent with many other management messages involving REQ and RSP messages. In addition, management messages are typically transmitted with a robust MCS and the ACK message does not add additional value in this case.

#### • Suggested remedy

– Delete sub-clause 6.3.2.3.64 and relevant statements referring to this sub-clause.

#### • Group decision

- Principle
- Agree that applying this messages to all the responses will introduce not necessary delay. Instruction to Editor: insert at page 17, line 25, the following text: "This message will be transmitted after receiving one of the CX-FWD-RSP messages with the Action Code as described at 15.5.3.4, 15.5.3.6, 15.5.3.9, 15.5.3.17, 15.5.3.19, 15.5.3.21, 15.5.3.23, 15.5.3.25, 15.5.3.27, 15.5.3.29, 15.5.3.31."

#### • Reason for group decision

- 1. The comment was introduced and accepted in the WG data-base IEEE 802.16-09/0012, as response to the additional comments from the WG;
- 2. Technically the message is necessary because some of the Action Codes of the CX-FWD-RSP may indicate a choice or a different behaviour from the requested one. This is the case of the Action Codes described in 15.5.3.4, 15.5.3.6, 15.5.3.9, 15.5.3.17, 15.5.3.19, 15.5.3.21, 15.5.3.23, 15.5.3.25, 15.5.3.27, 15.5.3.29, 15.5.3.31.
- 3. The resolution addresses the technical need but in a different way, therefore was marked as "principle".

# Comment B47 by Aik Chindapol

Type Technical Part of Dis Satisfied Page 31 Line 48 Fig/Table# Subclause 6.3.7.5.3

#### • Comment

- I do not agree with this change (changing the definition of the MAP relevance for the allocation start time) as implemented in D9. There should not be any ambiguity regarding the MAP relevance. The text in D9 changes the term "shall" to "should" and implies that the MAP relevance for the allocation start time is no longer normative. It causes confusion to the terminals and may cause the terminals to miss the MAP messages.
- Suggested remedy
  - Change the term "should" back to "shall "
- Group decision
  - Disagree
  - See the resolution and its reason for comment B58. Instruction to Editor: Add on page 23 after Allocation End time <8\*Tf" the following sentence: "The MAP relevance supported by a SS/MS is indicated in SBC-REQ/RSP messages".</li>

### • Reason for group decision

- 1. The use of word "should" implies a recommendation;
- 2. There is no confusion, as one of the bits in the SBC-REQ/RSP (see 11.8) idicate which MAP relevance is supported by a device;
- 3. The text at 6.3.2.3.23 and 6.3.2.3.24 indicate the proper TLVs to be used; 4. Changing to "shall" will make 802.16h incompatible with the existing devices.

# Comment B48 by Aik Chindapol

Type Technical Part of Dis Satisfied Page 33 Line 13 Fig/Table# Subclause 6.4.1.2

### • Comment

 I do not agree with this change (deletion of downlink-listen-before-talk) as implemented in D9. When co-existing with non-SSU, non-802.16 systems, the downlink-listen-before-talk mechanism needs to be in place in order to avoid collisions.

### • Suggested remedy

- Re-instate the last sentence (line 13-15) and sub-clause 6.4.1.4.5.

### • Group decision

- Disagree
- See the resolution and its reason for comment B58. Instruction to Editor: Add on page 23 after Allocation End time <8\*Tf" the following sentence: "The MAP relevance supported by a SS/MS is indicated in SBC-REQ/RSP messages".

### • Reason for group decision:

- 1. The use of word "should" implies a recommendation;
- 2. There is no confusion, as one of the bits in the SBC-REQ/RSP (see 11.8) indicate which MAP relevance is supported by a device;
- 3. The text at 6.3.2.3.23 and 6.3.2.3.24 indicate the proper TLVs to be used; 4. Changing to "shall" will make 802.16h incompatible with the existing devices.

# Comment B52 by Aik Chindapol

Type Technical Part of Dis Satisfied Page 72 Line 15 Fig/Table# Subclause 11.3

### • Comment

I do not agree with this change (adding the use of IP address for inter-network coordination) as implemented in D9. The use of the BS's IP address to coordinate interference cannot be implemented in its current form. It is not clear what this address should be (i.e., proxy). Besides Figure 402 (page 120), there is no normative text anywhere describing how to specify the IP address or how the mechanism actually works In addition, the IP address may be local (unlike BSID which is globally unique) and the mechanism then will not work with another system that belongs to another local IP address.

### • Suggested remedy

- Delete entries related to the use of IP address for interference coordination in Table 612b (BS\_NURBC TLV), sub-clause 11.1.13 and modify Fig 402 to remove IP address.
- Group Decision
  - Principle
  - Replace "BS IP Address" with "Network address of Source BS". Replace "IPv4" with "for example "IPv4". Replace "IPv6" with "for example IPv6"
- Reason for group decision
  - The change is editorial only, no new text was added: the tables which were previously on page 121 of the same document and were moved to page 72

### Comment A9 by Paul Piggin

Type Technical Part of Dis Satisfied Page 101 Line 49 Fig/Table# Subclause 15.4

### • Comment

Resolution of Comment 577 in Sponsor Ballot database 802.16-08/047r4 modified section 15.4 together with other sections by means of contribution IEEE C8021.16h-08/042. Furthermore resolution to Comment 696 consolidated section 6.4.1.3.4 by means of contribution IEEE C8021.16h-08/043. The motivation for these comments and subsequent resolutions was centered on PAR scope issues related to coexistence with systems other than 802.16. The 802.16h amendment still contains features and references pertaining to coexistence with systems other than 802.16. Comment 577 has therefore not been completely addressed. Using the argument that there is an implicit assumption that the amendment needs to coexist with other systems is not valid; in this case the amendment is clearly targeting inappropriate band. The amendment IEEE P802.16h/D8 contains 39 references to 'bursty systems'. 'Bursty systems' within the sense of the amendment are defined and exemplified by the term Wireless LANs. Furthermore there are 4 references to '802.11'. Coexistence with these or other systems is out of scope and therefore any specification should be removed. Specification of coexistence with 'bursty systems' is focused in section 15.4.1 and its sub sections specifically 15.4.1.4.1, and uses the feature name of 'CX-CBP'. Section 15.4.1.4 makes specific mention of coexistence with systems other than 802.16 systems.

### • Suggested remedy

- Delete section 15.4.1 and its subsections to remove specification of coexistence with 'bursty systems'. Remove other coexistence features related to coexistence with systems other than 802.16. Remove all references to 'bursty systems' throughout the draft and align the remaining specification accordingly. Remove all references to explicit coexistence with '802.11' systems throughout the draft and align the remaining specification accordingly. In light of these far reaching and extensive changes the document may have to be sent back to the Working Group for redrafting.

### Comment A9 by Paul Piggin – cont.

### • Group decision

- Disagree

### • Reason for group decision

- 1. The group disagrees that the coexistence with systems, like 802.11, is out of the PAR scope. We bring as argument the ITU-R allocations in the document RR-2008 Vol.1, where the systems providing MOBILE services are included in primary services in 2.4GHz and 5GHz. The coexistence with these systems is within the PAR scope "to facilitate the coexistence of such systems with primary users.".
- 2. The group disagrees with the proposed solution to comment A9, which targets to delete the clause 15.4.1, including the basic 802.16h coexistence approach between 802.16-based systems, based on the Coexistence Frame. On this approach resides the Coexistence between 802.16 based-systems, Coexistence Control Channel, Master Frame optimization, Token protocol, Message relaying, etc.
- 3. The group agrees that the word "bursty" should not be extensively used, and in many comments addressing the same issue we have deleted many appearances of this word.

# Schedule for Confirmation Ballot and Resolution Meeting

- Working Group (2010-03-18) approved comment resolutions for completion of P802.16h/D15
- Recirculation 8 of P802.16h/D15:
  - Open on March 24, close on April 8
    - If successful, send draft to RevCom
    - If not, resolve comments by a Ballot Resolution Committee and Recirculate between April 19 and May 3
      - If successful, send draft to RevCom
      - If not, resolve comments at 802.16 Session #67 (10-13 May)

# **802 LMSC Motion**

• To authorize conditional approval to forward P802.16h to RevCom

Made by: Marks Seconded: Vote: Approve: Dis: Abstain: