

**IEEE 802.16 Working Group on Broadband Wireless Access**<http://WirelessMAN.org>

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To: Wonil Roh and Vladimir Yanover  
Chairs, WiMAX Forum Technical Working Group

Subject: Response to WiMAX Forum Liaison Statement IEEE L802.16-08/052r1 on clarification and corrections to IEEE Std 802.16

Dear Wonil and Vladimir,

Thank you for your liaison statement (IEEE L802.16-08/052r1) of 28 August 2008 detailing issues with IEEE Std 802.16 related to interoperable test certification development. All of the issues identified in Appendix A were resolved during the IEEE 802.16's Session #57 in Kobe from 16-19 September. Each of the four approved remedies will be included in the new draft IEEE 802.16Rev2/D7 that will be available within a few weeks. The specific remedies for each one of the four issues are shown below and are consistent with the contemplated remedies proposed in your statement.

Note that the Revision is under development and there is a chance that the specific remedies will not be part of the final published standard. Please note that the document "IEEE P802.16-2004/Cor2/D3" mentioned in your reference lists is obsolete and not part of an active standardization activity.

Should a similar need arise in the future, the 802.16 Working Group welcomes the opportunity to assist with resolving such issues in a timely manner.

Regards,

Roger Marks,  
Chair, IEEE 802.16 Working Group on Broadband Wireless Access

cc: Ron Resnick, President, WiMAX Forum  
Jon Labs, Chair, IEEE 802.16 Maintenance Task Group  
Paul Nikolich, Chair, IEEE 802 Executive Committee

**1. HARQ ACK Region Allocation** – In item 1 of the liaison statement from the WiMAX forum, it is recommended that the standard be modified to specify that the maximum number of HARQ ACK regions is 1. The standard currently limits the number of ACK regions in section 8.3.5.4.25 (see bold text below). Please note that the recommendation is for TDD mode.

8.3.5.4.25 HARQ ACK Region Allocation IE

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**For TDD mode, at most one ACK region per frame may be defined.** For FDD/H-FDD mode, at most two ACK regions per frame may be defined (by using up to two HARQ ACK Region Allocation IE-s or TLV-s). If more than one ACK region is defined, the index of the ACK region associated with each burst is specified in a HARQ DL MAP IE and/or a OFDMA SUB-DL-UL-MAP message. The MS accumulates the ACKCH index separately for each ACK region.

The 802.16 Working Group concluded that the existing standard is clear on this issue.

**2. HARQ ACK Disabled Burst** – In item 2 of the liaison statement from the WiMAX forum, it is recommended that bursts which have the ACK disable flag set to 1 be treated as normal (non-HARQ) bursts and be counted as non-HARQ bursts when considering the maximum number of bursts per frame per MS (Option 2).

The remedy of the 802.16 Working Group is contained in IEEE C802.16maint-08/299:

[http://ieee802.org/16/maint/contrib/C80216maint-08\\_299.doc](http://ieee802.org/16/maint/contrib/C80216maint-08_299.doc)

**3. Tx Power Reports** – In item 3 of the liaison statement from the WiMAX forum, a set of clarifications are recommended regarding Tx Power Reports. The recommendations include cases when the MS should transmit Tx Power Reports and cases when the MS should stop transmitting Tx Power Reports.

The remedy of the 802.16 Working Group is contained in IEEE C802.16maint-08/296:

[http://ieee802.org/16/maint/contrib/C80216maint-08\\_296.doc](http://ieee802.org/16/maint/contrib/C80216maint-08_296.doc)

**4. Physical supported parameter TLV** – In item 4 of the liaison statement from the WiMAX forum, it is recommended to remove language saying that the Current Tx Power TLV is encapsulated in the physical supported parameters compound TLV (see 11.1.1 and 11.8.3.3). The issue is that the standard does not define the physical supported parameters compound TLV.

The remedy of the 802.16 Working Group is contained in IEEE C802.16maint-08/298:

[http://ieee802.org/16/maint/contrib/C80216maint-08\\_298.doc](http://ieee802.org/16/maint/contrib/C80216maint-08_298.doc)