Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a> >		
Title	Various Corrections		
Date Submitted	2003-03-05		
Source(s)	Marc Engels Jan Erreygers LoraNet Kapeldreef 75 B-3001 Leuven Belgium	Voice: +32 16 28 16 17 Fax: +32 16 28 86 50 marc.engels@imec.be jan.erreygers@imec.be	
Re:	Call for contribution IEEE 802.16d-03/02		
Abstract	Corrections related to terminology, REP/RSP TLV encodings and ARQ		
Purpose	For inclusion in the 802.16d amendment document		
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 <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: 16="" ieee802.org="" ipr="" notices="" patents="">.</http:></mailto:chair@wirelessman.org>		

# **Various Corrections**

Marc Engels, Jan Erreygers LoraNet

# 1. References

[1] IEEE 802.16a

# 2. Corrections

## 2.1. Terminology

- 2.1.1. In section 8.4.3.5 of [1] the term "carrier index" is used:
  "Carrier Mapping (carrier index: I value Q value)"
  It should be "frequency offset index" as the values are both positive and negative (carrier index can only be positive).
  Proposal: change "carrier index" to "frequency offset index".
- 2.1.2. Table 116be of [1] uses the term "carrier offset index" which is not defined. It should be "frequency offset index". Proposal: change "carrier offset index" in Table 116be to "frequency offset index".
- 2.1.3. In the second paragraph of section 8.4.5.3.3 of [1], the term "carrier index" is used with a wrong meaning. Proposal: change this paragraph to "If the chosen REQ Region is a REQ Region-Focused, after choosing its four parameters, the SS shall transmit, during the chosen Transmit Opportunity in the chosen frame, four carriers which comprise the chosen contention channel as defined in Table 116be. The amplitude of all other carriers shall be zero."

## 2.2. REP/RSP TLV encodings

The second table of section 11.1.6 of [1] is not constructed according to the TLV conventions. Different report parameters should not be described by the same TLV encodings. Each report parameter should have its own TLV code. Proposal: change the second table in section 11.1.6 to:

REP-REQ Report Type	Name	Тур е	Length	value
bit#0=1	Channel number	1.1	1	Physical channel number (see 8.6.1) to be reported on.
bit#0 =1	Start Frame	1.2	2	Frame number in which measurement for this channel started.
bit#0 =1	Duration	1.3	3	Cumulative measurement duration on the channel in multiples of $T_s$ . For any value exceeding 0xFFFFFF, report 0xFFFFFF.
bit#0=1	Basic Report	1.4	1	Bit#0: Wireless Human detected on the channel Bit#1:Unknown transmissions detected on the channel Bit#2:Primary User detected on the channel Bit#3:Unmeasured. Channel not measured
bit#1 =1	CINR Report	1.5	2	1 byte: mean (see also 8.3.2, 8.4.7, 8.5.11) for details) 1 byte: standard deviation
bit#2=1	RSSI Report	1.6	2	1 byte: mean (see also 8.3.2, 8.4.7, 8.5.11) for details) 1 byte: standard deviation

#### 2.3. **ARQ**

In sections 11.4.8.18.4, 11.4.8.18.5 and 11.4.8.18.7 it is stated that the ARQ\_FRAGMENT\_LIFETIME, ARQ\_SYNC\_LOSS\_TIMEOUT and ARQ\_RX\_PURGE\_TIMEOUT are to be considered infinite when this parameter is set to zero. This is not good. In a compliance test, this can never be tested. Proposal: delete "consider infinite" in the text and set in the tables 0 = reserved :

#### 11.4.8.18.4 ARQ FRAGMENT LIFETIME

The BS shall set this parameter. The DSA-REQ or DSA-RSP messages shall contain the value of this parameter as set by the BS. If this parameter is set to 0, then the ARQ\_FRAGMENT\_LIFETIME value shall be considered infinite.

Туре	Length	Value	Scope
[24/25].17	2	0 = Reserved 1 - 655350 (10 µs granularity)	DSA-REQ DSA-RSP

#### 11.4.8.18.5 ARQ\_SYNC\_LOSS\_TIMEOUT

The BS shall set this parameter. The DSA-REQ or DSA-RSP messages shall contain the value of this parameter as set by the BS. If this parameter is set to 0, then the ARQ\_SYNC\_LOSS\_TIMEOUT value shall be considered infinite.

Туре	Length	Value	Scope
[24/25].19	2	0 = Reserved 1 - 655350 (10 µs granularity)	DSA-REQ DSA-RSP

### 11.4.8.18.5 ARQ\_RX\_PURGE\_TIMEOUT

The BS shall set this parameter. The DSA-REQ or DSA-RSP messages shall contain the value of this parameter as set by the BS. If this parameter is set to 0, then the ARQ\_RX\_PURGE\_TIMEOUT value shall be considered infinite.

Туре	Length	Value	Scope
[24/25].23	2	0= Reserved 1-655350 (10 $\mu s$ granularity)	DSA-REQ DSA-RSP