Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Action Items from Session #45**
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Source(s)	Paul Piggin Voice: 1 858 480 3100 NextWave Broadband Inc. Fax: 1 858 480 3105 12670 High Bluff Drive ppiggin @ nextwave.com San Diego CA 92130 USA
Re:	Working Group Letter Ballot #24 for IEEE P802.16h/D1.
Abstract	This document contains a resolution of action items assigned during Session #45.
Purpose	
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Action Items

Paul Piggin
NextWave Broadband Inc.

Overview

This document addresses a number of action items assigned to the author at Session #45. These action items are related to:

- *1. The REP-RSP does not include the interference description per sub-frame, so a new MAC Messages for 6.4 needs to be defined.*

- *2. Clarify SIFS and inter-frame duration.*

- *3. Provide tables for each regulatory domain specifying the parameters for the equations in section 6.4.1.2.*

- *4. Revision of the use of the term 'Secondary User'.*

- *5. Further editorial issues.*

Specific editorial changes

This section provides a list of changes to the draft document.

Blue underlined text represents specific editorial additions.

~~Red strikethrough~~ text is to be deleted.

Black text is text already in the draft.

Bold italic text is editorial instructions to the editor.

1. Review of REP-REQ/REP-RSP MAC messages

Original comment: *The REP-RSP does not include the interference description per sub-frame, so a new MAC Messages for 6.4 needs to be defined.*

The description of REP-RSP usage in 6.3.18.1 provides assessment on a permutation zone level which will allow the desired operation described above.

2. Clarification of SIFS and inter-frame duration

Original comment: *Clarify SIFS and inter-frame duration.*

There is no reference to SIFS or inter-frame duration.

3. Extended channel numbering

Original comment: *Provide tables for each regulatory domain specifying the parameters for the equations in section 6.4.1.2.*

Make the following editorial changes to 6.4.1.2 'Extended channel numbering':

Extended channel numbering provides an enhancement to the definition for *channel center frequency* given in section 8.5.1. This extension provides channel references beyond the limitations of 5-6GHz as defined in that section. The channel references are described according to the following terms.

— Extended Channel Number (*ExChNr*) - A 2 byte ~~specific~~ channel number reference ~~in MHz~~. *ExChNr* is a logical channel number within a given band and enables the absolute frequency to be calculated with the use of a~~a~~this 2 byte reference. *ExChNr is numbered from zero.*

— Base Frequency~~Channel Reference~~ (*BaseFrequency~~ChRef~~*) - A 4~~1~~ byte base reference to frequency range or deployment band in k~~M~~Hz. *~~BaseChRef is an index into a list of known operational bands, termed BaseCenterFrequency(). For a given value of BaseChRef then Base~~Center~~Frequency~~()~~* provides the lowest, or base, ~~center~~ frequency for a particular band of operation.

— Channel spacing (*ChSp*) - A 2 byte channel spacing value in 10kHz increments. The channel spacing is referenced from center frequency to center frequency.

The terms above are used to calculate the physical *channel center frequency*, termed *ChannelCenterFrequency*, and is defined accordingly:

*ChannelCentreFrequency [MHz] = (Base~~Center~~Frequency~~(BaseChRef)~~*0.001) [MHz] + (ChSp/2*0.01)) [MHz] + (ExChNr *(ChSp*0.01)) [MHz]*

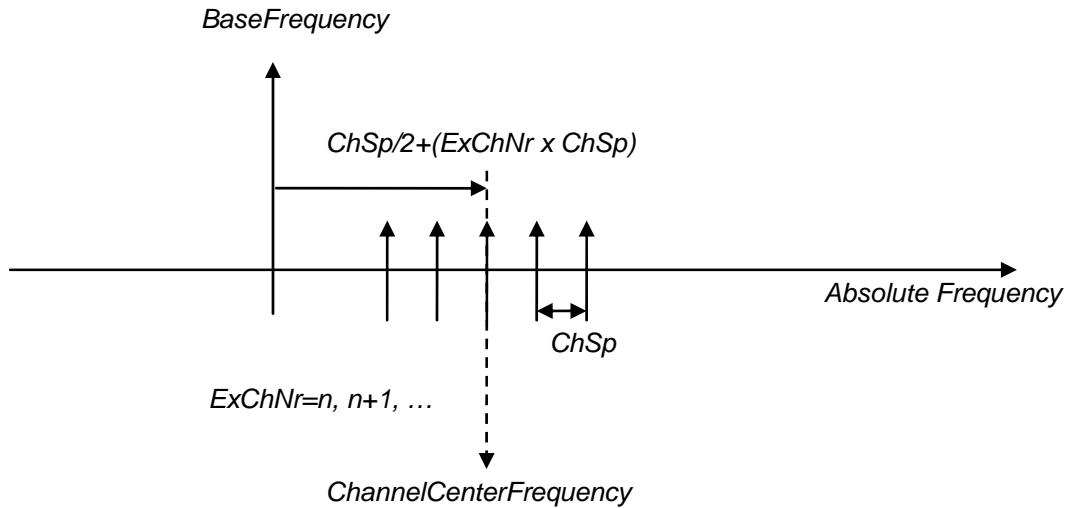An illustrative example for 3.65-3.7GHz band with 5MHz channelisation is given:

BaseFrequency (kHz) = 3 650 000

ChSp (10kHz)= 5 00

ExChNr = 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

ChannelCentreFrequency (MHz) = 3652.5, 3657.5, 3662.5, 3667.5, 3672.5, 3677.5, 3682.5, 3687.5, 3692.5, 3697.5

Replace figure h1 with the following:

Make the following changes to the rows in the tables in sub clauses 11.7.8.14 and 11.7.8.15 'WirelessMAN-CX capability' and 'WirelessHUMAN capability':

Base Frequency Channel Reference (*BaseFrequencyChRef*)	46	41	Base Frequency Channel Reference in kMHz providing base reference to frequency range or deployment band.	REG-RSP

Make the following changes to table 369a REG-REQ/RSP management message encodings

Type	Parameter
46	Base Frequency Channel Reference (*BaseFrequencyChRef*)

4. 'Secondary User' terminology

Original comment: *Revision of the use of the term 'Secondary User'.*

There is an issue with our use of the term 'secondary user' to describe users that were not a 'primary users' and there not protected by regulation. 'Secondary user' is a regulatory term and a defined meaning. The term 'non-specific spectrum user' is preferred.

'secondary user' appears 4 times in [1].

Replace the 4 instances of 'Secondary Users' with 'non-Specific Spectrum user' in table B1, sub clause B.1, page 153 of [1].

For all instance of 'non-Specific Spectrum User' and 'Specific Spectrum User' in [1] capitalize S, S, and U in 'Specific Spectrum User'.

5. Further editorial issues

5.1: Make the following change to definition 107 in clause 3 'Definitions':

3.107 Coordinated coexistence mechanism: A coexistence mechanism relying on the exchange of protocol-based messages among radios.

5.2: Subclause 5.1.2, page 42, table h3. Change references from 'non-collaborative' to 'uncoordinated', and change references from 'collaborative' to 'coordinated'.

References

[1] IEEE P802.16h/D1: *Air Interface for Fixed Broadband Wireless Access Systems Improved Coexistence Mechanisms for License-Exempt Operation*, Draft Standard.