Project	IEEE 802.16 Broadband Wireless Access Working Group <a href="http://ieee802.org/16">http://ieee802.org/16</a>					
Title	Updated Transmit Spectral Mask					
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Re:	Sponsor Ballot Comment					
Abstract	This document proposes a clarification to the OFDM DL subchannelization zone					
Purpose	For consideration as a modification to D8 during Sponsor Ballot resolution.					
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**Updated Transmit Spectral Mask** 

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## Introduction

The purpose of this document is:

- To provide the spectral mask's parameters of the lower bandwidth profiles (BW<10 MHz).
- To optimize the spectral mask performance by accurately specifying the related settings of the spectrum analyzer.

## **Explanation of Problem**

The 802.16d-2004 doesn't specify the parameters of the spectral mask for the lower bandwidth profiles (<10 MHz). Beside that the spectrum analyzer settings are not accurately described in order to optimize the RF equipment behavior against the given test equipment settings.

The actual document specifies: The lower bandwidth (2.5, 3.5, 5 and 7 MHz) for the transmit spectral mask. The related spectrum analyzer's settings for the above bandwidth's profiles.

## **Suggested Remedy**

Update text in 8.5.2 as follows:

Replace:

"The transmitted spectral density of the transmitted signal shall fall within the spectral mask as shown in Figure 265 and Table 341. The measurements shall be made using 100 kHz and a 30 kHz video bandwidth. The 0 dBr level is the maximum power allowed by the relevant regulatory body."

With

"The transmitted spectral density of the transmitted signal shall fall within the spectral mask as shown in Figure 265 and Table 341. The measurements shall be made using 100 kHz and a 30 kHz video bandwidth the spectrum analyzer's settings specified in Table 341. The 0 dBr level is the maximum power allowed by the relevant regulatory body."

Channelization		B	C	D [MII-]	Spectrum Analyzer Settings
[MHZ]	[MHZ]	[MHZ]	[MHZ]	[MHZ]	
20	9.5	10.9	19.5	29.5	SPAN=80 MHz, RBW=100 kHz,
					VBW=1 kHz, Scan Time Auto
10	4.75	5.45	9.75	14.75	SPAN=40 MHz, RBW=30 kHz,
					VBW=0.3 kHz, Scan Time Auto
7	3.325	3.815	6.825	10.325	SPAN=30 MHz, RBW=30 kHz,
					VBW=0.3 kHz, Scan Time Auto
5	2.375	2.725	4.875	7.375	SPAN=20 MHz, RBW=30 kHz,
					VBW=0.3 kHz, Scan Time Auto
3.5	1.663	1.908	3.4125	5.163	SPAN=15 MHz, RBW=30 kHz,
					VBW=0.3 kHz, Scan Time Auto
2.5	1.188	1.363	2.438	3.838	SPAN=10 MHz, RBW=10 kHz,
					VBW=0.1 kHz, Scan Time Auto

Update Table 341 as follows: