Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	Spectrum Mask Proposal
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Re:	Document to support non-binding comment to sponsor ballot for IEEE P802.16/Cor1/D3
Abstract	This document proposes a spectrum mask requirement for IEEE 802.16-2004
Purpose	The document is intended for consideration in comment resolution process of the Sponsor Ballot on draft 802.16-2004/Cor1/D3
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Spectrum Mask Proposal

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Introduction

The transmitter requirements listed currently in IEEE 802.16-2004 do not include a transmit spectral mask for licensed bands although regulatory requirements for the region of operation apply. The guard band subcarriers are assumed not to be transmitted, but there is no requirement on their maximum power level. A spectral mask is specified for license-exempt bands. We see the following important advantages for specifying a spectral mask:

1) Meeting a suitably defined spectral mask in the specification can guarantee that regulatory requirements in a wide range of regions are met.
2) Co-existence issues with other 802.16 operators and/or other systems are handled more easily if all transceivers are guaranteed to meet the specified spectral mask.

Proposed Text Changes

Insert new section 8.3.10.3 on page 88 of draft 802.16-2004/Cor1/D3 before section 8.3.11 as follows.

8.3.10.3 Transmitter Spectral Mask

For licensed bands, the transmitted spectral density of the transmitted signal shall fall within the spectral mask shown in Figure 212a. The measurements shall be made using 100 kHz resolution bandwidth and a 30 KHz video bandwidth. The 0 dBr level is the maximum power spectral density allowed by the relevant regulatory body.

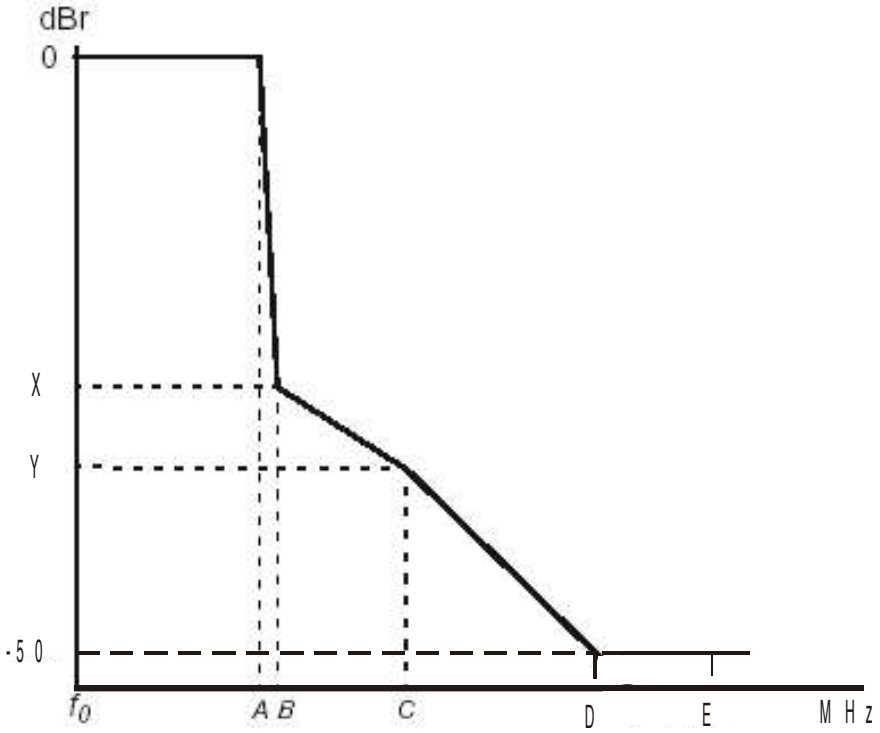

Figure 212a

In Figure 212a,

X= -25 dB for SS and –32 dB for BS

Y= -32 dB for SS and –38 dB for BS

A= 0.475 F

B= 0.545 F

C= 0.975 F

D= 1.475 F

E= 2.4 F

F= channel bandwidth

Insert new section 8.4.12.4 on page 174 of draft 802.16-2004/Cor1/D3 before section 8.4.13 as follows.

8.4.12.4 Transmitter Spectral Mask

For licensed bands, the transmitted spectral density of the transmitted signal shall fall within the spectral mask shown in Figure 212a. The measurements shall be made using 100 kHz resolution bandwidth and a 30 KHz

video bandwidth. The 0 dBr level is the maximum power spectral density allowed by the relevant regulatory body.

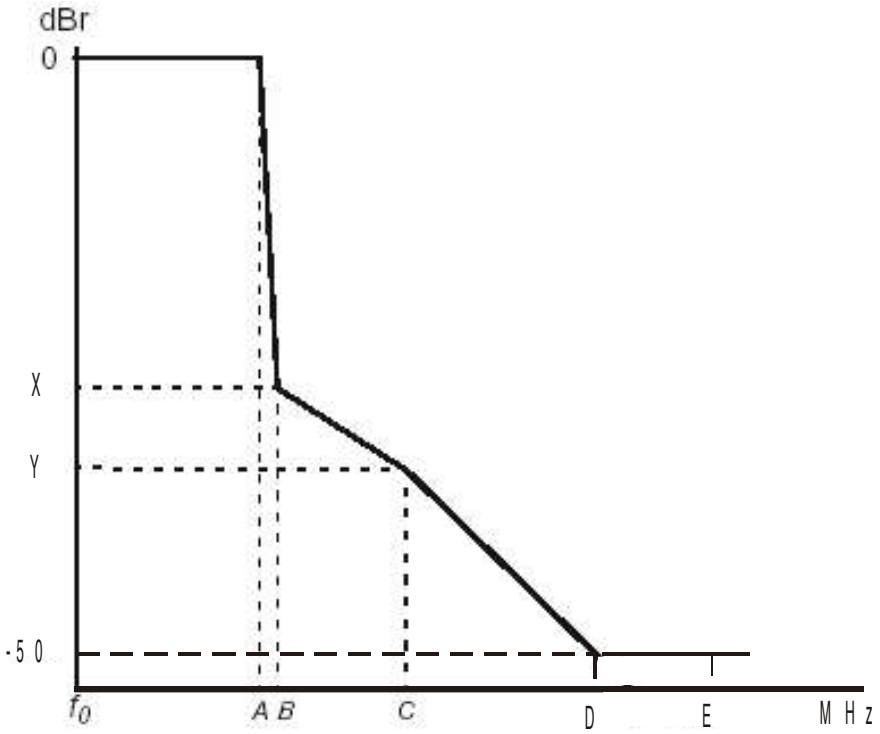

Figure 263a

In Figure 263a,

X= -25 dB for SS and –32 dB for BS

Y= -32 dB for SS and –38 dB for BS

A= 0.475 F

B= 0.545 F

C= 0.975 F

D= 1.475 F

E= 2.4 F

F= channel bandwidth