

RF Spectrum Ad Hoc – Minutes April 16, 2013

Provided the IEEE-SA Patent Policy link. Everyone on the call was familiar with the patent policy.

- <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>

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Exclusion Band Feedback - Edwin Mallette (Bright House Networks)

Q: The PHY may need blocks of subcarriers, is that okay?

A: I understand that there are technology limitations.

Q: Do you understand that it may take 1 MHz of bandwidth for an exclusion subband to get 50 dB attenuation?

A: Yes, I understand that we would need additional bandwidth to get significant attenuation.

C: If you null one subcarrier, there is significant leakage. So we need to null more than that to get good attenuation. Suggest 1 MHz resolution but the positioning could be more granular.

A: One of the significant benefits of OFDM is to not lose 6 MHz every time we work around a legacy service.

C: In the upstream we need to protect legacy (DOCSIS): 1.6, 3.2 and 6.4 MHz (1.28, 2.56 and 5.12 Mbaud). Return channel for settop box has a bandwidth from 192 kHz up to 1 or 2 MHz. 1 MHz is more common.

C: There are limited resources in upstream. We may need finer resolution in the upstream.

C: Smallest service we need to protect is 6 MHz in downstream and 192 kHz in upstream.

C: Exclusion subbands are for protection of legacy service.

C: The plant carrier is CW so we do not want to exclude a full 6 MHz.

C: In China it may be difficult to build a 192 MHz, maybe exclusion subband be used to provide narrow bandwidths

A: Yes that may be possible.

Q: Exclusion subbands are in terms of number of OFDM subcarriers we turn off, which may be wider than the bandwidth of the legacy service we protect.

C: If you have pilots on the sides of exclusion subbands we need to consider that when selecting the width of the exclusion subbands.

C: Resource blocks (mini slots) are typically for the upstream and not the downstream.

Q: Is there way the resource blocks can be split

A: Typically there are not split.

C: Will ask Tom to give a presentation next week on exclusion subbands.

In other groups an exclusion subband can also include a pilot. Similar terms are used different in that group.

We could add the working definition of an “Exclusion sub-band in the slides”

Ad Hoc chair could put together a summary of the straw polls in one document.

Attendance Template

Attendance

Person	Affiliation
Michel Allard	Cogeco Cable
Edward Boyd	Broadcom
Hesham ElBakoury	Huawei
Robert Howald	Motorola
Bill Keasler	Ikanos
Mark Laubach	Broadcom
Ed Mallette	Bright House Networks
Leo Montreuil	Broadcom
Michael Peters	Sumitomo Electric
Bill Powell	Alcatel Lucent
Saif Rahman	Comcast
Duane Remein	Huawei
Steve Shellhammer	Qualcomm
Joe Solomon	Comcast