

RF Spectrum Ad Hoc – Status Report

Steve Shellhammer (Qualcomm)

Conference Calls

- The Ad Hoc holds weekly conference calls
- Tuesdays 11 AM Pacific Time (2 PM Eastern Time)
- Conference calls between November and January meetings
 - November 20
 - November 27
 - December 4
 - December 11
 - January 8
 - January 15
- Minutes of the meetings have been sent to the email reflector

Presentations

- Leo Montreuil, “OFDM TX Shaping for 802.3bn,”
January 8, 2013
- Provided some recommendations for OFDM symbol windowing
- Gave illustrations of the power spectral density plots of the transmit signal, with various windowing parameter values

Open Issues

- Discussed RF Spectrum Open Issues in a number of areas
 - FDD Downstream center frequencies
 - FDD DS, FDD US and TDD frequency bands
- The majority of the time was spent on recommendations on specifications for exclusion sub-bands
 - Recommendations for the Task Force are provided on subsequent slides
- All Open Issues are captured in the Open Issues list that is updated after conference calls

Recommendations on Exclusion Sub-Bands

1. Exclusion sub-band can be on the lower portion of the channel, the upper part of the channel, or within the channel
2. Exclusion sub-bands are configured by the operator
3. Exclusion sub-bands are for reducing the channel bandwidth, protection of legacy cable services, for controlling known egress/ingress in specific spectrum.
4. An exclusion sub-band is a group of contiguous subcarriers

Recommendations on Exclusion Sub-Bands

5. Define a sub-group of sub-carriers that is 200 kHz wide
 - For example, 4 subcarriers for an 4k FFT, or 8 subcarriers for an 8k FFT
6. Exclusion sub-bands consist of a multiple of contiguous sub-groups, with a minimum exclusion sub-band of five sub-groups (bandwidth of 1 MHz)

Next Steps

- Vote in the Task Force to adopt the recommendations of the Ad Hoc
- Agree on recommendations in these areas
 - FDD DS, FDD US, and TDD Frequency Bands
 - Channel Center Frequencies
 - OFDM windowing
 - Other
- Bring recommendations to the Task Force in March