

RF Spectrum Ad Hoc – Status Report

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Formation

- The RF Spectrum Ad Hoc was formed at the September 2012 EPoC Task Force Meeting
- During the Study Group phase there were several unofficial conference calls on RF Bandwidth

Prior to Ad Hoc Formation

- At the September TF meeting there was a presentation [1] given on choices the Task Force should make regarding RF Bandwidth
 1. Specify the Required RF Bandwidth for each of the supported PHY modes
 2. Specify the rules for exclusion sub-bands
 3. Specify the out-of-band (OOB) emission requirements
 4. Decide if the PHY will use absolute subcarrier frequencies

Conference Calls

- The Ad Hoc holds weekly conference calls
- Tuesdays 11 AM Pacific Time (2 PM Eastern Time)
- We could add some calls at a different time if there is interest from our participants from Asia
- Three conference calls so far
 - October 9
 - October 16
 - October 23
- Minutes of the meetings have been sent to the email reflector
- Next call
 - November 6
 - No call on October 30 due to travel

Goals – Provide Recommendations to the Task Force

- Recommend the Frequency Bands and Center Frequencies for the various PHY modes
 - FDD Downstream
 - FDD Upstream
 - TDD
- Recommend channel bandwidth for various PHY modes
 - FDD DS = 192 MHz (Task Force decision)
 - FDD US
 - TDD
- Recommend rules for exclusion sub-bands
- Recommend out-of-band (OOB) emission requirements for protection of legacy services
- Recommend channel bonding configurations

Presentations

- FDD Downstream Frequency Band and Center Frequencies [2]
 - Frequency Band from 108 MHz to 1200 MHz
 - Center frequencies on 2 MHz grid
- OFDM Subcarrier Nulling in Downstream P802.3bn [3]
 - Described purpose of in-band nulling to mitigate interference to and from other services
 - Provided some recommendations on in-band nulling, details available in the presentation
- High-Band EPoC Deployment Scenarios [4]
 - Described several deployment scenarios for both FDD and TDD, in both North America and China
 - Described spectrum impact of various scenarios

Plan Going Forward

- Hear proposals on various areas related to RF Spectrum
- Build consensus on specific recommendations
- Make recommendations to the Task Force at Task Force meetings

References

1. Steve Shellhammer, Hesham ElBakoury, Ed Boyd, Bill Powell and Leo Montreuil, “EPoC RF Bandwidth Task Force Choices,” September 2012
2. Avi Klinger, “FDD Downstream Frequency Band and Center Frequencies,” October 2012
3. Leo Montreuil, “OFDM Subcarrier Nulling in Downstream P802.3bn,” October 2012
4. Bill Powell and Randy Sharpe, “High-Band EPoC Deployment Scenarios,” October 2012