

Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [Questions and Comments on AV-OFDM PHY]

Date Submitted: [May 2, 2008]

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Re: [In response to TG3c comments]

Abstract: [Comment resolutions]

Purpose: [To be considered in TG3C baseline document.]

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Questions and Comments on AV-OFDM PHY

2 May 2008

Summary

- This document lists 9 questions for the AV-OFDM text.
- The questions are sorted as below:
 - 3 questions on AV-OFDM PHY overview
 - 4 questions on AV-OFDM PHY modulation and coding
 - 1 question on HRP frame format
 - 1 question on LRP frame format

On AV-OFDM PHY Overview

- Why is channel 2 mandatory? Pg. 110
- ACK shall be sent with the same data rate as the preceding data. In AV-OFDM PHY, is directional LRP ACK used for HRP frames. If so, kindly comment on the consistency of this design.
- There are two outer encoders in figure 187 pg. 114. Should those be outer interleavers instead of outer encoders?

On AV PHY Modulation and Coding

- Kindly comment on the possibility of using the common Reed-Solomon (255,239) for a unified FEC scheme.
- The explanation for interleaver in pg.117 is somewhat complex. Kindly provide clearer explanation. Kindly define i, k, b and N clearly.
- In pg.119 multiplexer 'stations' are mentioned. Kindly define 'station'.
- For the symbol mapper in pg. 124 table 170, there is a '16-QAM-TCM'. It may be an editorial mistake.

On HRP Frame Format

- In the HRP header pg.128, 1 bit is allocated to show if UEP mapping is used for the aggregated frames. In cases where the frames are constructed by different data types (e.g. video, audio, command), is the 1 bit sufficient?

On LRP Frame Format

- The explanation for long omni preamble started from the last bit towards the first bit, whereas that of the short omni preamble, otherwise. Kindly keep the consistency for both texts. Pg.130