

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

Submission Title: 802.15.4 2020 Cor1 OFDM PHR Consolidated Proposal

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Source: Kunal Shah(Itron), Henk de Ruijter (Silicon Labs), Jeng-Shiann Jiang (Vertexcom), R. Salazar Cardozo (Landis+Gyr)

E-Mail:

Re: 802.15.4 2020 Cor1 OFDM PHR Consolidated Proposal

Abstract:

Opening Report for 802.15.4 2020 Cor1 OFDM PHR Consolidated Proposal

Purpose: Provide information which kind of changes are needed to the standard.

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OFDM PHR Issue

- Inconsistency in the description of the OFDM PHY header in section 20.2.4 of IEEE 802.15.4-2020. The description is ambiguous.

Proposals Heard:

- SUN OFDM PHY PHR – doc#171rev0
- SUN-OFDM PHR MCS ambiguity problem and the resolution – Doc#305rev2
- Resolution to OFDM PHY PHR – Doc#386rev0
- Proposal for OFDM PHR Clarifications – Doc#393Rev1
- Comparison of SUN OFDM PHR proposals– doc#29rev0
- Candidates for SUN-OFDM PHR of New Low Rates– Doc# 37rev0

Consolidated Proposal

20.2.4 PHR

Change the second paragraph as follows:

The PHR occupies symbols for each OFDM options as described in Table 20-9, for phyOfdmInterleaving PIB attribute. The PHR shall be transmitted using the lowest supported MCS level, as described in Table 20-10, for the option being used, except for OFDM option 3 and OFDM Option 4, the PHR shall be transmitted using MCS1 and MCS2 respectively, when the packets are transmitted with MCS1 or higher for OFDM option 3 and MCS 2 or higher for OFDM Option 4 is used. It is sent to the convolutional encoder starting from the leftmost bit in Figure 20-5 to the rightmost bit.