IEEE P802.22 Wireless RANs

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| Errata – 802.22 base std, CRC calculation before padding |
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Abstract

Because of the concatenation rule used for adding 0-padding, a clarification needs to be added for the calculation of the CRC of the bursts. We propose to include this clarification in sub-clause 7.8.5.

***Proposed corrections to the IEEE Std 802.22TM- 2011***

The need for a clarification in sub-clause 7.8.5

Sub-clause 7.8.5 states the way the CRC of 32 bits is appended to the end of the MAC bursts. However, sub-clause 9.7.2.1.3 specifies the rule of concatenation to be used to spread the 0-padding bits in the two last FEC blocks of the transmitted burst. Because of this rule, some 0-padding bits may end-up before the CRC bits at the end of the burst since they could be contained in the penultimate FEC block. As a result, some ambiguity may exist in whether these preceding 0-padding bits need to be included in the CRC calculation or not.

Proposed clarification

It is proposed to make clear that the CRC calculation for the burst needs to be done before the inclusion of the 0-padding bits according to the concatenation rule specified in sub-clause 9.7.2.1.3. It is proposed to add the follow sentence at the end of 7.8.5: “The CRC shall be calculated before the inclusion of the 0-padding at the end of the burst to meet the slot and FEC block boundaries according to the concatenation rule contained in sub-clause 9.7.2.1.3.”