**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | **CfP Responses Overview** |
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| Re: |  |
| Abstract | [Detailed overview of the CfP responses] |
| Purpose | [Description of what the author wants P802.15 to do with the information in the document.] |
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5.5.1 Star network formation

* Extended star topology (Kunmin Yeo (ETRI), 15-18/405r0)

6.2.5.1 CSMA-CA algorithm

* Modified CSMA-CA (Kunmin Yeo (ETRI), 15-18/405r0)

10.2.5 Receiver ED

* Additional CSMA/CA (Kunmin Yeo (ETRI), 15-18/407r0)

10.2.7 Clear channel assessment (CCA)

* Modified CCA (Kunmin Yeo (ETRI), 15-18/407r0)

**24. LECIM FSK PHY Specification**

24.1 General

* Modified preamble length (Johannes Wechsler (IIS), 15-18/394r0)

24.2 PPDU format for LECIM FSK PHY

* Additional SFD in case of fragmented transmission (Johannes Wechsler (IIS), 15-18/394r0)

24.2.1 SHR field format

24.2.1.1 Preamble field format

24.2.1.2 SFD field format

24.2.2 PHD field format

* Modified PHR (Kunmin Yeo (ETRI), 15-18/405r0)

24.2.3 PHY Payload field

24.3 Modulation and coding for LECIM FSK PHY

* Additional symbol rates (based on ~2.3k) with modulation index 0.5 in case of fragmented transmission (Johannes Wechsler (IIS), 15-18/394r0)
* Additional low-rate symbol rates for non-fragmented transmission (Yeong Min Jang (Kookmin University), 15-18/413r1)

24.3.1 Reference modulator

24.3.2 Bit-to-symbol mapping

24.3.3 Modulation quality

24.3.3.1 Modulation quality

24.3.3.2 Zero crossing tolerance

24.3.4 FEC

* Additional LDPC FEC with rate ¼ (Nabil Loghin (Sony Europe Limited), 15-18/400r0)
* Additional convolutional code with rate 1/3 (Johannes Wechsler (IIS), 15-18/394r0)

24.3.5 Code-bit interleaving

* Additional sub-packet fragmentation and interleaving, only in case of fragmentation (Johannes Wechsler (IIS), 15-18/394r0)

24.3.5a Sub-packet transmission

* Transmission frequencies and timing for fragmented transmission (Johannes Wechsler (IIS), 15-18/394r0)
* Additional initial synchronization signaling in case of fragmented transmission (Johannes Wechsler (IIS), 15-18/394r0)

24.3.6 Spreading

* Apply the spreading also to the SFD transmission for SF=2,4,8 (Yeong Min Jang (Kookmin University), 15-18/413r1)

24.3.6a MSK-Precoding

* Additional MSK-precoding (Johannes Wechsler (IIS), 15-18/394r0)

24.4 Data whitening for LECIM FSK PHY

24.5 LECIM FSK PHY RF requirements

24.5.1 Operating frequency range

24.5.2 Radio frequency tolerance

24.5.3 Channel switch time

24.5.4 Transmit spectral mask

24.5.5 Receiver sensitivity

24.5.6 TX-to-RX turnaround time

24.5.7 RX-to-TX turnaround time

24.5.8 Transmit power