**IEEE 802.15**

**Wireless Specialty Networks (WSN)**

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| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSN) | |
| Title | **802.15 TG4ad Minutes May 2024** | |
| Date Submitted | [7 September 2024] | |
| Source | [Phil Beecher]  [Wi-SUN Alliance] | email: [pbeecher@wi-sun.org] |
| Re: | [May 2024 802.15 Session] | |
| Abstract | [IEEE 802.15 TG4ad Minutes] | |
| Purpose | [IEEE 802.15 TG4ad Minutes] | |
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**Monday 15 July 2024, PM2**

Meeting called to order

Chair, Phil Beecher presents Opening and Closing Report #nnnn

Call for patents – none declared

Discuss Agenda – agenda agreed by unanimous consent

Minutes of May Session – approved by unanimous consent

Presentations will commence on Tuesday.

Meeting recessed to enable participants to attend other meetings – return at 17:15

17:15, meeting called to order. No further business for the day, meeting recessed to Tuesday.

**Tuesday 16 July, PM1**

Meeting called to order. Call for essential patents, none declared.

Meeting hears presentations

Sangsung Choi presents <https://mentor.ieee.org/802.15/dcn/24/15-24-0376-00-04ad-the-use-case-for-ng-sun-phys-in-ship-area-network.pptx>

Question about what transmit power level is required. Question about frequency band, is 2.4GHz appropriate.

14:16 Henk De Ruitjer presents <https://mentor.ieee.org/802.15/dcn/24/15-24-0398-00-04ad-o-qpsk-lr-phy-for-sun.pdf>

Discussion about doubling data rate and including FEC.

14:50 Hiroshi Harada presents <https://mentor.ieee.org/802.15/dcn/24/15-24-0378-00-04ad-evaluation-methods-for-transmission-characteristics-of-ieee-802-15-4ad-in-the-presence-of-interference.pdf>

General discussion and agreement.

**Wednesday 17 July, PM2**

16:01 Call to order

Call for patents – none declared.

Joerg Robert presents <https://mentor.ieee.org/802.15/dcn/24/15-24-0408-00-04ad-next-steps-for-the-interference-model.pptx>

There was a question about impact of signal strength.

Request to add capture data from Japan using this methodology.

Discussion about applicability of interference models for different use cases and regions.

Hiroshi Harada presents <https://mentor.ieee.org/802.15/dcn/24/15-24-0290-02-04ad-channel-model-proposal-for-ieee-802-15-4ad.pptx> .

There is discussion about channel models. There is consensus on using 3GPP Specification # 38.901.

There is discussion about appropriate delay spread and guard interval. Group should consider delay spread and guard interval for both downtown use and for longer range in rural areas (e.g. 10km) for OFDM.

Discussion about static or doppler – should consider 1 or 2Hz doppler.

Discussion about path loss model – general agreement to just use SNR.

**Thursday 18 Jul, PM1**

Call to order

Call for patents – none declared.

Chair presents Technical Guidance document <https://mentor.ieee.org/802.15/dcn/24/15-24-0061-02-04ad-draft-802-15-4-next-generation-sun-phy-technical-guidance-document.docx> . Volunteers sought for providing more detail for each section. We will consider during teleconference call.

Group will hold one teleconference call on 29 August, 6:00am PDT.

No other business, meeting adjourned.