IEEE P802.15
Wireless Specialty Networks

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Abstract

# This document contains the TG13 Multi-Gigabit/s Optical Wireless Communications Meeting minutes from the Phone call June 5 12-13 U.K. time.

**IEEE 802.15.13**

**Monday, June 5, 2018, 12-13 U.K. time**

Attendance:

* John Li Qiang (Huawei)
* Nikola Serafimovski (pureLiFi)
* Chong Han (pureLiFi)
* Volker Jungnickel (Fraunhofer HHI)
* Malte Hinrichs (Fraunhofer HHI)
* Kai Lennert Bober (Fraunhofer HHI)
* Sang-Kyu Lim (ETRI)

The call was opened by the TG13 Chair, Volker Jungnickel (Fraunhofer HHI).

Malte Hinrichs (Fraunhofer HHI) presented doc. 15-18/0173r1 on updated simulation results.

* Main new thing is clarification regarding performance vs. SNR or vs. Eb/N0. There is no difference between RS and uncoded when plotting the results over SNR, while when converting to Eb/No there is a difference because of the overhead. This is particularly visible for the header and less for the payload.
	+ Q: Do you have in simulation results for D3 or D4 channels, as the current simulations are only for AWGN.
	+ A: No, could be added in the future. The payload evaluations did not show significant differences so faras there is no significant multi-path. There may be differences when D3 and D4 channels are investigated.
* There are on-going discussions between HHI and ETRI regarding the preamble on the PM-PHY in order to address the open unified design issue addressed in Warsaw.

Chong Han (pureLiFi) presented doc. 15-18/0168r3.

* C: Some grouping in information fields may be useful for the Advanced Modulation. There may be groups of fields for MCS, Adaptive transmission, MIMO and relaying. Groups could also be used in other PHYs with minor variations. Grouping of header fields would allow the rest of the PHY modes to use a similar structure
	+ Q: Asked for clarification on the number of eU-OFDM streams used.
	+ A: Either eU-OFDM is not used or 4 streams are used
	+ Q: Asked for clarification on the MIMO CQI indicator
	+ A: There are 2 possible methods for CQI collection.
	+ Q: Why there is a possibility to have different PHYs
	+ A. These are left over from before. It might allow the same PHY to be used with different MACs.
	+ Q: What are the 5-bits in the second field “Polled STA”?
	+ A: These 5-bits are used as the short address when a STA is connected to a Coordinator.
	+ C: The text should be provided.
	+ C Explain the difference with “Polled STA” and “Next STA to poll” structures.
	+ Q: The High Reliability control should be a normal part of the PSDU. It looks so that a lot of MAC functionality is in the High reliability control field. Is it possible to move that back into the MAC?
	+ A: Adding High Reliability control significantly improves the efficiency of the system.
	+ Q: This blurs the line between the PHY and MAC.
	+ A: This concept increases the efficiency and is becoming increasingly popular. In this case, it is optional and does not need to be implemented.
	+ Q: It looks like an aggregation of control and data structure.
	+ A: Any additional optional proposals can be considered.

Chong will create text to accompany the MAC layer.

The phone call was recessed until June 13, 12:00 UK time (13:00 CEST).