IEEE P802.15
Wireless Specialty Networks

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| IEEE 802.15.13 Telco Meeting minutes between September and November 2018  |
| Date: 2018-11-10 |
| Author: |
| Name | Affiliation | Address | Phone | Email |
| Kai Lennert Bober | Fraunhofer HHI |  |  | kai.lennert.bober@hhi.fraunhofer.de |
| Volker Jungnickel | Fraunhofer HHI |  |  | volker.jungnickel@hhi.fraunhofer.de |

Abstract

# This document contains the TG13 Multi-Gigabit/s Optical Wireless Communications Meeting telephone conference minutes between September and November 2018.

**Tuesday, Oktober 16, 2018, 10:30AM to 11:30AM EDT**

Attendance:

Volker Jungnickel (HHI)

Nikola Serafimofski (pureLiFi)

Chong Han (pureLiFi)

Xu Wang (vlncomm)

Kai Lennert Bober (HHI)

Malte Hinrichs (HHI)

1. The phone call was opened by the TG13 Chair, Volker Jungnickel (Fraunhofer HHI).
* The Chair asked for topics to be included in the Agenda.
* Clarification of the state of draft and already incorporated comments.
* Technical discussion about idea to reuse parts of 802.15.4-2015, may be discussed later
1. State of the draft
* John sent draft 3.0 without the comments that were already covered in Kona to Volker and Chong. The Word document has format issues but is sufficient to be worked with.
* Chong and John will clarify the accepted comments
* Chong will work them into the produced word document
* Q: Word version will simplify the work of the group and the Technical Editor may implement everything in frame maker already for the next draft?
* Discussion:
	+ It might not be necessary to keep a frame maker document up to date. It may be more efficient to keep a working document in Word format and finally convert it to frame maker for publication.
	+ Comments will be provided with help of the word document, potentially stored on some IEEE 802.15 WG work space
	+ The Technical Editor produces the Word document and John will finally convert it into frame maker when all changes were made.
* Q: Next draft is needed 1 or 2 weeks before next meeting. Until when could the Technical Editor implement the comments from last time into the word document?
* A: Could implement before end of next week.
1. Ideas to reuse new IEs from 802.15.4
* MAC mechanism + MAC frame format needs considerable work.
* IEs keep structure simple and less frame types are needed.
* Specific frame function or vendor-specific information can be modularized in IEs.
* There would be 4 IE types at least from Xu for HCM assignment for example.
* Xu could prepare document with IE proposals and upload them on mentor
* It is in theory not required to have different frame types in the frame control field at all if IEs can be used to differentiate frame functions. But for packet parsing purposes it may be beneficial to have some performance-critical frames indicated via the frame type (with fixed IEs).
* Lennert will prepare presentation regarding frame types and IEs

The phone call was recessed until Oct. 23.

**Tuesday, Oktober 23, 2018, 8-9 EDT time**

Attendance:

Volker Jungnickel (HHI)

Nikola Serafimofski (pureLiFi)

Chong Han (pureLiFi)

Xu Wang (vlncomm)

Kai Lennert Bober (HHI)

Malte Hinrichs (HHI)

Agenda:

* Status of the draft
* Xu’s MAC topics in doc. 15-18-0504r0
* Lennert’s MAC frame format with IEs
1. Status of the draft
* Chong distributed Word-Document of Draft 3.1 but was not uploaded by Rick Alfvin
* Document will be sent to Tuncer and Xu
* Rick will be asked again to do it by the Chair
1. Xu’s MAC topics in doc. 15-18-0504r0
* New frames proposed but content is not yet finished
* ToBackhaul + FromBackhaul needs explanation with the specific topology. Information is topology-specific and does not have to be included in every frame.
* ACK must not necessarily included in header
* However it is needed in Polling mechanism, as ACK can be included in every frame header.
* It was agreed that the HCM MCS request is a control frame. The response is implicitly contained in the next PHY header, hence no Ack is needed for the request frame. A control frame can be used.
* HHI and VLNComs proposals for LED selection will be prepared and then merged/converged.
1. Lennert’s MAC frame format with IEs
* IEs can be used to send MCS requests in every frame, not only once in a while
* CSMA/CA is part of 802.11bb, and obviously redundant here. Why it is needed also in 802.15.13, except for initial access?
* No conclusion about this question.

The phone call was recessed until Nov. 6.

**Tuesday, November 6, 2018, 8:00AM-10:00AM EDT**

Attendance:

* Volker Jungnickel (HHI)
* Sang-Kyu Lim (ETRI)
* Chong Han (pureLiFi)
* Xu Wang (VLNComm)
* Kai Lennert Bober (HHI)
* Nikola Serafimovski (pureLiFi)

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

Agenda

* Conflict in new schedule between TGbb and TG13 on Monday, Nov. 12
* Finalization of the MAC
* AoB before Bangkok
1. Time conflict in Bangkok
* A conflict between the upcoming meetings of 15.13 and 11bb on Monday in Bangkok has been detected. Volker and Nikola to resolve the conflict. The result was that the Monday slot will be released by TG13 in favor of TGbb. Volker to write an email to Bob Heile.
1. Finalization of the MAC.
* Current plan is to freeze the specification in the upcoming meeting. The Chair feels this schedule is too tight. Second issue is that the state needs more discussion.
* In Bangkok, only the second round of MAC layer discussions will be held.
* The Chair asked the Question to everybody: do you think the deadline is realistic?
	+ Nikola: Pushing the MAC again will delay finalization of the standard. Nikola fears feature creep. Delay may make the standard less attractive. He wants to focus more on TGbb. He want’s to stop adding features and just resolve comments.
	+ Sang-Kyu: Cannot attend next two meetings, feels unable to advice anything to the group.
	+ Xu: Would appreciate more time but reality is progress is stalling due to other workload for all contributors, not only due to TGbb. How can minimum changes be reached in order to make current draft work? The introduction of Information Elements may lead to a lot of discussion, even if postponed, Xu may not be able to dedicate more time.Minimal changes should be finalized until January. He needs control and management frames for VLNComm’s implementation. Xu thinks it’s realistic to present MAC text by January.
	+ Chong: Is also more in favor of freezing in January. Adding frames after freeze is still possible. Adding a frame is always possible if the committee agrees.
	+ Volker: G.vlc was freezed in October and undergoes comment collection+resolution right now. From this perspective he advices to formally freeze the features in November but let the proposers more time to provide the corresponding text until January.
	+ Nikola argues that he would like to have the text there already in November.
* No decision can be taken during a telco anyway. Xu, Sang-kyu and John cannot come to the Bangkok meeting, while Xu and John will be able to attend in January, i.e. all MAC experts will be there again. The current round shows there is a majority in favor of finishing the text in January. Also the attendance issue suggests the same.
1. AoB before Bangkok
* Chong wants to summarize management and control frames and submitted frame types already to John. Chong asks everybody to submit needed frames to Mentor in order to get it integrated into the draft. Chong asks again to present required frame formats before the meeting in Bangkok. Nikola says that any brainstorming should be done before sitting together. Then just merging in Bangkok.
* Xu would like to review frame proposals and add comments.
* Locate comments via subsection and paragraph and manually line numbers.
* It was proposed to create a document with TODO points to finish the standard during the Bangkok meeting and to agree upon responsibilities and set some doable deadlines. The document should then be approached regularly and updated when TODOs are don. The document shall be put together in Bangkok in a brainstorming session.

The phone call was recessed until Nov. 13 in the first session in Bangkok.