**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) |
| Title | TG3d March 2016 Meeting Minutes |
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| Re: |  |
| Abstract | Meeting notes on the 802.15 TG3d March 2016 Meetings |
| Purpose | Meeting Minutes |
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**Minutes of the March 2016 TG3d Meetings**

The TG3d meetings were held on 14-16 March 2016 at Venetian Macau.

**<<Meeting #1 Mon PM1>>**

* Meeting was called to order at 13:30.
* The patent policy was mentioned and no patent contributions were discussed.
* Approval of meeting minutes of the last meetings (15-16-0068r00)
and of conference calls (15-16-0165r00).
	+ Minutes of the last meetings (15-16-0068r00) were approved.
	+ Minutes of conference calls were approved with modification for 15-16-0165r01.
* Approval of the agenda (15-16-0157r02)
	+ The agenda was approved with no objection.
* Listening Contributions:
	+ **Contribution #1:**
	+ Alexander Fricke, “ASCII-Format for Channel Transfer Function,” (15-16-0148r01)
	+ 12 \*.zip files (following) which include channel realization data on the mentor are referred in this document.
		- 15-16-0219r00 ChannelTransferFunction\_CloseProximity\_Antenna\_set#1
		- 15-16-0220r00 ChannelTransferFunction\_CloseProximity\_Antenna\_set#2
		- 15-16-0221r00 ChannelTransferFunction\_CloseProximity\_Antenna\_set#3
		- 15-16-0222r00 ChannelTransferFunction\_CloseProximity\_Antenna\_set#4
		- 15-16-0217r00 ChannelTransferFunction\_DataCenter\_Antenna\_set#4
		- 15-16-0216r00 ChannelTransferFunction\_DataCenter\_Antenna\_set#3
		- 15-16-0215r00 ChannelTransferFunction\_DataCenter\_Antenna\_set#2
		- 15-16-0214r00 ChannelTransferFunction\_DataCenter\_Antenna\_set#1
		- 15-16-0213r00 ChannelTransferFunction\_IntraDevice\_Antenna\_set#4
		- 15-16-0212r00 ChannelTransferFunction\_IntraDevice\_Antenna\_set#3
		- 15-16-0211r00 ChannelTransferFunction\_IntraDevice\_Antenna\_set#2
		- 15-16-0210r00 ChannelTransferFunction\_IntraDevice\_Antenna\_set#1
	+ **Contribution #2:**
	+ Sebastion Rey, “How to derive the Channel Impulse Response from a broadband
	+ Channel Transfer Function?,” (15-16-0207r00)
	+ Presented practical way to derive impulse responses for link level simulations.
	+ **Contribution #3:**
	+ Danping He, “Kiosk Channel Modeling,” (15-16-0168r02)
	+ Presented a channel modeling for kiosk usage.. Using up to second order reflections is sufficient for modeling.
* Work on Channel Modeling Document, CMD (15-14-0310r17)
	+ Corrected and reviewed.
	+ This document would be uploaded as r18.
	+ Would be reviewed by the TG for the motion at the next meeting.
* Work on the technical requirements document, TRD (15-14-0309r18)
	+ There have been no technical revisions after the last meetings. Only editorials had been revised.
	+ This document would be uploaded as r19
	+ Would be reviewed by the TG for TG motion at the next meeting.
* Work on the ECD (15-15-0412r11)
	+ This document would be uploaded as r12.
	+ Would be reviewed by TG for the TG motion at the next meeting.
* Recess at 15:28.

**<<Meeting #2, Tue AM1 >>**

* Meeting was called to order at 8:10.
* The patent policy was mentioned and no patent contributions were discussed.
* Work on the technical requirement document
	+ Reviewed, revised and uploaded to the mentor as 15-14-0309r20.
* Work on the channel modeling document
	+ Reviewed, revised and uploaded to the mentor as 15-14-0310r19.
* Work on the evaluation criteria document
	+ Reviewed, revised and uploaded to the mentor as 15-15-0412r13.
* Work on call for proposals
	+ Reviewed, revised and uploaded to the mentor as 15-14-0936r03.
* TG Motion for approval of these documents
	+ Motion for the approval of TRD
	+ Moved by Kuerner
	+ Seconded by Hosako
	+ Motion carried
		- y/n/a = 8/0/0
* Motion for the approval of CMD
	+ Moved by Kuerner
	+ Seconded by Hosako
	+ Motion carried
		- y/n/a = 8/0/0
* Motion for the approval of ECD
	+ Moved by Kuerner
	+ Seconded by Hosako
	+ Motion carried
		- y/n/a = 8/0/0
* Motion for the approval of CfP
	+ Moved by Kuerner
	+ Seconded by Hosako
	+ Motion carried
		- y/n/a = 8/0/0
* Work on the liaison statement to ITU-r (15-15-0699r05)
	+ Review and revised.
	+ Would be uploaded to the mentor as r06.
* Schedule planning (15-14-0155r09)
	+ Reviewed and discussed.
	+ Suggested date for presenting of first proposals: July 2016
	+ Proposal to start the letter ballot process: November 2016
	+ Target to start the sponsor ballot process: March 2017
* Work on the liaison statement to ETSI ISG mmW (15-15-0722r03).
	+ Reviewed and discussed.
	+ Would be uploaded to the mentor as r04.
* Recess at 9:45.

**<<Meeting #3, Wed AM1, Joint Meeting with IG THz>>**

* Meeting was called to order at 8:05.
* The patent policy was mentioned and no patent contributions were discussed.
* Approval of the IG THz Agenda (15-16-0158r01)
	+ Approved with no objection.
* Approval of Minutes from IG THz meetings in Atlanta, Jan 2016 (15-16-0098r00)
	+ Approved with no objection.
* Motion for the TG approval of the call for proposals (15-16-0936r03)
	+ TG motion (see closing plenary slides, 15-16-0225)
	+ Moved by Kürner
	+ Seconded by Hosako
	+ Motion carried y/a/n = 7/0/0
* Motion for the TG approval of ITU-r liaison statement (15-15-0699r07)
	+ TG motion (see closing plenary slides, 15-16-0225)
	+ Moved by Kürner
	+ Seconded by Hosako
	+ Motion carried with y/a/n = 7/0/0.
* Motion for the TG approval of ETSI Liaison statement (15-15-0722r05)
	+ TG motion (see closing plenary slides, 15-16-0225)
	+ Moved by Kürner
	+ Seconded by Hosako
	+ Motion carried with = y/s/n =7/0/0.
* Listening contributions:
	+ **Contribution #4**Bile Peng, Sebastian Rey, Thomas Kürner (TU Braunschweig), “Channel Characteristics Study for Future Indoor Millimeter And Submillimeter Wireless Communications,” (15-16-0208r00)
		- This contribution presented a preliminary study of channel characteristics in the frequency ranges of 75 - 110 GHz and 270 - 320 GHz.
		- Selecting a small office as a typical application scenario, carried out extensive measurements with the Vector Network Analyzer in the room.
		- A ray tracing simulator is applied for reproduction of the measurement results and a good match in spatial distribution of propagation paths between measurement and simulation is achieved.
* Discussion on the technical expectation document
	+ Reconstruction of the technical expectation document is proposed by Kürner.
	+ Kürner would present the design of the new technical expectation document.
	+ Support the idea? Straw poll: y/a/n = 8/2/0.
* Adjourned at 9:00.

**Tasks completed during the meetings:**

* Four technical contributions
	+ By TU-Braunschweig, Beijing Jiaotong University, NICT, and NTT.
	+ Mainly on the channel modeling document and the technical requirement document, IG THz technical expectation document.
* Documents for the call for proposals have been finally approved
	+ Technical requirement document
	+ Channel modeling document
	+ Evaluation criteria document
	+ Call for proposals

 Liaison Statements to ITU-R W1A and ESTSI ISG mWT have been finalized.

**Next steps:**

* Before July San Diego session
	+ There are no meetings in May Waikoloa session,
	+ after Waikoloa: Presentations of preliminary proposals at San Diego