**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title |  | |
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| Re: |  | |
| Abstract | Meeting notes on the 802.15 SG 100G November 2013 Plenary meeting | |
| Purpose | Meeting Minutes | |
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**Minutes of the September 2013 SG 100G**

The SG 100G meeting took place on 12 November 2013 in the time slots Tuesday AM1+AM2+PM2. Additionally a joint meeting with IEEE 802.1 and IEEE 802.15 TG 10 was held on 11 November 2013 at the time slot Tuesday PM1

Meeting was called to order at 8.00 am on 12 November 2013. The patents statement was mentioned and no patent contributions were discussed. The September 2013 meeting notes of the SG 100G were approved.

Call for contributions/Changes of the agenda or for any other business, no discussions followed.

7 contributions were presented:

**Contribution #1 :** Thomas Kürner, TU Braunschweig (Germany), “On the Scope of IEEE 802.15 SG 100G”; (Document **15-13-0635-01-0thz**)

This presentation gives some background information and the scope of IEEE 802.15 SG 100G. This Information is intended for the the 802.1 / 802.15 TG10 / 802.15 SG100G Joint Session

**Contribution #2 :** Thomas Kürner, TU Braunschweig (Germany),“ Requirements for Wireless Backhauling / Fronthauling”; (Document **15-13-0636-01-0thz**)

Wireless backhauling/fronthauling is one of the potential applications for a standard on 100G. In this contribution the terms wireless backhauling and fronthauling are explained and requirements coming from recent developments in cellular networks are explained.

**Contribution #3 :** Norihiku Sekine, NICT (Japan), “30-Gbps-class terahertz transmission for fixed point-to-point link using optical technique “; (Document **15-13-0653-00-0thz**)

30-Gbit/s-capacity transmission using multi-level modulation at 300 GHz are briefly presentedas information for future 100-Gbit/s terahertz point to point link.

**Contribution #4 :** Jae-Young Kim, NTT (Japan), “Feasibility test of THz channel for high-speed wireless link“; (Document **15-13-0679-00-0thz**)

For high speed wireless communication, a feasibility test of THz channel has been presented. Previously, we presented preliminary experiment results for 300 GHz wireless link (doc. IEEE 802.15-15-10-0845-00-0thz, Nov. 2010). In this contribution, we provide recent progress based on THz photonics and MMIC technologies for higher throughput.

**Contribution #5 :** Michael Grigat/Ralf-Peter Braun, Deutsche Telekom (Germany) , “Phase Noise Aspects“; (Document **15-13-0643-01-0thz**)

This contribution considers important requirements of high signal quality for THz signal generation and demonstrates first results achieved for Stimulated Brillouin Scattering (SBS) method which enables line width of THz waves below 1 Hz with low phase noise.

**Contribution #6 :** Thomas Kürner, TU Braunschweig (Germany), “Ultrabroadband Indoor Channel Measurements and Calibrated Ray Tracing Propagation Modelling at THz Frequencies “; (Document **15-13-0637-00-0thz**)

The first part of this contribution describes a measurement campaign, where ultrabroadband channel characteristics at 300 GHz in an indoor environmen have been determined. These measurements have been used for the calibration of a ray tracing propagation model, which is described in the second part of the contribution.

**Contribution #7 :** Masashi Shimizu, NTT (Japan), “The New Public Phone Service -Non Contact Ultra High Speed Contents Download“; (Document **15-13-0684-00-0thz**)

This contribution will present the non-contact ultra high speed transmission service over 60-GHz band. With this contribution, it is considered that the 60-GHz band will be useful in non-contact file download kiosk system with up to 24 G bit/s and with over 100 G bit/s using MIMO.

**Tasks completed during the meeting**

1) Document **15-13-0635-01-0thz** has been presented to the joint session with IEEE 802.1 and IEEE 802.15 TG 10.

2) Working **Drafts for PAR and 5C** have been further discussed (Documents **15-13-0522-03-0thz** and **15-13-0523-02-0thz**). To support the technical claims made in the 5C the living document with references has been updated (to appear as Document **15-13-0561-01-0thz**)

3) Work on the **Technical Expectation Document** (TED). The content of the TED has been discussed and updated (Document **15-11-0745-11-0thz.**

4) A living document on Study Group items has been created (Document **15-11-0692-01-0thz)**

5) A call for application will be created for the January Interim meeting.

The meeting was adjourned on 11 November 2013 at 5.45 pm.

**Attendees:**

Thomas Kürner, TU Braunschweig

Rick Roberts, Intel

Yunlong Cai, Huawei

Katsuhiro Ajito, NTT

Norihiko Sekine, NICT

Masashi Shimizu, NTT

Jae-Young Kim, NTT

Kazu Takahashi, Panasonic

Pengfei Xia, Interdigital

Tuncer Baykas, Tohoku University

Masayyuki Ariyoshi, ATR

Shu Kato, Tohoku University

Prabad Yenigallo, Gigoplix

Brian Hagino, Taiyo Yuden

Radnakrishna Canchi, Kyocera Communications

Tim Harringtion, Zebra

Frederik Beer, FAU/IIS

Ralf-Peter Braun, Deutsche Telekom

Michael Grigat, Deutsche Telekom

Steve Jillings, SEMTECH

Mike McInnis, The Boeing Company

Jon Adamas, Lilee Systems

Ken Hiraya, NTT

Kenchi Mori, Panasonic

Shoizi Kitasawa, ATR