**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 July 2016 Meeting Minutes | |
| Date Submitted | 28 July 2016 | |
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| Re: |  | |
| Abstract | Meeting notes on the 802.15 TG3d July 2016 Meetings | |
| Purpose | Meeting Minutes | |
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**Minutes of the July 2016 TG3d Meetings**

The TG3d meetings were held on 25-28 July 2016 at Manchester Grand Hyatt San Diego.

**<<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 (15-16-0203r00).
  + Approved with unanimous consent.
* Approval of the agenda (15-16-0451r01)
  + Approved with unanimous consent.
* Preliminary proposals:
  + **Contribution #1:**
  + Thomas Kürner, “Preliminary Proposal for THz PHY in IEEE 802.15.3,” (15-16-0482r01)
  + Presented a preliminary PHY specifications proposal for TG3d call for proposals.
  + **Contribution #2:**
  + Akifumi Kasamatsu, “Preliminary Proposal for TG3d CfP,” (15-16-0482r01)
  + Presented a preliminary proposal for TG3d call for proposals, main target is kiosk downloading.
  + In proposer’s simulation, 64-QAM is feasible.
* Recess at 14:30.

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

* Meeting was called to order at 8:30.
* The patent policy was mentioned and no patent contributions were discussed.
* Detailed discussion on proposals
  + **Contribution #3:**
  + Sebastian Rey, “Thoughts towards a baseline for a proposal,” 15-16-0510r00
  + Provided ideas on channelization and modulation schemes as combination from the two preliminary proposals (15-16-0481r01 and 15-16-0482r01)
  + Comments and discussions on the modulation scheme
    - Feasibility and frequency utilization.
  + Comments and discussion on the channelization
    - Channel bonding under interference in the data center application scenario should be considered.
    - Regulations are in progress.
* Recess at 9:20.

**<<Meeting #3, Tue PM1, Joint Meeting with IG THz>>**

* Meeting was called to order at 13:30.
* The patent policy was mentioned and no patent contributions were discussed.
* Listening contributions:
  + **Contribution #4:**
  + Sebastian Rey, “Simulation Results of a Phased Array at 300 GHz (15-16-0493r00)
  + Presented a concept of a phased array operating at 300 GHz with horn elements and some simulation results are presented.
  + Horn antenna array with four elements was simulated.
  + Fed with WR-3 waveguide flanges.
  + Radiation pattern variation within working frequency band would be small.
  + **Contribution #5:**
  + Sebastian Rey, “Progress in Regulation above 275 GHz (15-16-0492r00)
  + Presented In the last WRC a resolution was approved to have an Agenda Item 1.15 in the upcoming WRC 2019.
  + In these slides some information on the progress is presented
* Discussion on ITU-R liaison statements
  + **Contribution #6:**

Thomas Kürner,“ITU-R WP5C Liaison Statement (15-16-0513r00),” and “ITU-R-WP5C working document towards a preliminary draft (15-16-0514r00)”

* + **Contribution #7:**

Thomas Kürner,“ITU-R WP5A liaison statement (15-16-0507r00),” and “ITU-R WP5A working document towards a preliminary draft (15-16-0494r00)”

* + Documents:
    - ITU-R WP5C Liaison Statement (15-16-0513r00)
      * WP 5C of ITU-R welcomes further input contributions from APT and IEEE; other external organizations are also encouraged to provide details of the fixed service applications and their characteristics, operating in the frequency range 275 450 GHz. WP 5C will consider these fixed service applications, so that the report could fully address the issues pertinent to technical and operational characteristics of systems associated with work on WRC-19 agenda item 1.15.
      * WP 5C will consider materials provided by the external organizations and take necessary action as appropriate, upon receipt of input contributions at its next meeting scheduled for 7-16 November 2016.
    - ITU-R-WP5C working document towards a preliminary draft (15-16-0514r00)
      * “Annex 3 to Working Party 5C Chairman's Report “,
    - ITU-R WP5A liaison statement (15-16-0507r00)
      * “ITU-R WP 5A Technical and operational characteristics of the Land Mobile Service (LMS) 275-450 GHz”
      * Liaison statement to external organizations
    - ITU-R WP5A working document towards a preliminary draft (15-16-0494r00)
      * “Annex 28 to Working Party 5A Chairman’s Report”
  + Deadline for the submission of contributions above is October 31, 2016
  + In September 802 TG3d meetings this draft should be approved by the WG and be submitted and be approved to 802.18 to be submitted to ITU-R before the deadline shown above.
* Recess at 14:55.

**<<Meeting #4, Wed AM1>>**

* Meeting was called to order at 9:00.
* The patent policy was mentioned and no patent contributions were discussed.
* Discussion on future PAR to 802.1AC (MAC Services Definition)
  + Proposals include data center application.
  + 802.1AC standards bridge with other network
  + TG3d would have to input a page or two into 802.1AC.
* PAR change for frequency range extension for OOK mode?
  + The frequency allocation is not yet decided; hence our stance would be to propose the allocation.
* Recess at 9:45

**<<Meeting #5, Thu PM1>>**

* Meeting was called to order at 13:30.
* The patent policy was mentioned and no patent contributions were discussed.
* Discussion on future PAR to 802.1AC (MAC Services Definition)
  + Kuerner informed about the way to prepare the PAR to amend 802.1AC.
* New schedule, approved as in 15-15-0155r11
  + Start letter ballot in January 2017.
  + Target to start sponsor ballot July 2017.
* AOB? - None
* Adjourned at 13:48.
  + Moved by Hosako, seconded by Estrada, approved by unanimous consent.

**Tasks completed during the meetings:**

* Two preliminary proposals
  + By TU-Braunschweig and NICT.
* Preparation to final proposal.
* Preparation of the liaison Statements to ITU-R WP5A and WP5C