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**IEEE P802.15**  
**Wireless Personal Area Networks**

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Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)		
Title	Memo of Tele-Conference Call for TG3c, 2008 Aug 27		
Date Submitted	[2 <sup>nd</sup> Sep, 2008]		
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Re:			
Abstract	Memo of the Aug 27 <sup>th</sup> teleconference		
Purpose	Memo of the Apr 27 <sup>th</sup> teleconference		
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**Memo of Tele-Conference Call for TG3c, 2008 Aug 27<sup>th</sup>****Date:** Aug 27<sup>th</sup>, 2008, 2.00pm in JST**Attendees:**

Michael McLaughlin (DecaWave), Nobuhiko Shibagaki (Hitachi), Abbie Matthew, Zhiguo Lai (NewLans), Brian Gaffney (No Affiliation), Bruce Bosco (Motorola), Raymond Yu (Panasonic), Jason Trachewsky (Broadcom), Noam Livneh (Qualcomm), Makoto Noda, Hiroyuki Yamagishi, Keitarou Kondou (Sony), Steve Pope (No Affiliation), Shuzo Kato, Hiroshi Harada, Akio Iso, Fumihide Kojima, Zhou Lan, Chang-woo Pyo, Junyi Wang, Mohammad Azizur Rahman, Tuncer Baykas, Chin-Sean Sum (NICT)

**Next Meeting:**

3 September 2008, 1500 PDT, 4 September 2008, 0000 Brussels, 0700 KST/JST  
(Samsung host)

**What discussed:**

- 1 Doc. 08/589 “Comparison of star 8-QAM and other 8-point constellations” presented by M. McLaughlin.
  - 1.1 J. Trachewsky inquired the FEC type used for star 8-QAM and 16-QAM. M. McLaughlin replied that both use RS(255,239).
  - 1.2 S. Kato inquired the reason for the superior 8QAM performance over 8PSK in slide 9. M. McLaughlin replied that 8-PSK’s bad performance at higher Eb/No takes place due to the phase noise.
- 2 Doc. 08/550 “Responses to comments in document 08-0432-05” presented by Z. Lai.
  - 2.1 J. Trachewsky commented that the transmitter and receiver antenna gain of 15dBi are too high and impractical. Z. Lai replied that the values will be double checked.
  - 2.2 J. Trachewsky asked for the advantage of DAMI over  $\pi/2$ -BPSK. Z. Lai replied that DAMI has lower complexity as compared with  $\pi/2$ -BPSK. Z. Lai added that for example no DSP is needed in DAMI devices.
  - 2.3 S. Kato inquired the PHY mode for beaconing in DAMI devices. Z. Lai replied that Common Mode beacons will be used in both transmission and receiving for DAMI PNC-capable and non-PNC capable devices.
- 3 Doc. 08/588 “Responses to comments in document 08-0432-05” presented by R.Y Zhan.
  - 3.1 N. Livneh asked whether OOK transmit power meets other regulations besides the FCC regulations. R.Y. Zhan replied that the Japanese regulation is met. N. Livneh asked about the transmit power limit in the Japanese regulation. S. Kato clarified that the maximum transmit power is 10dBm in a total of 2.5GHz bandwidth.
  - 3.2 J. Trachewsky inquired the transmitter specification for the OOK spectrum in the PSD mask. R.Y Zhan replied that transmitter employing root-raised cosine (RRC) pulse filter with 0.25 roll-off factor, and the TG3c power amplifier model with OBO=3dB is used.
  - 3.3 J. Trachewsky asked for advantage of OOK devices over  $\pi/2$ -BPSK devices. R.Y. Zhan replied that  $\pi/2$ -BPSK transmitter needs to rotate between the inphase and

quadrature branches, whereas OOK transmitter needs only one branch. This will therefore require lower power consumption in OOK systems. J Trachewsky asked that in what order is the power consumption difference between  $\pi/2$ -BPSK and OOK. R.Y. Zhan replied that no exact number is available now.

- 3.4 N. Livneh asked for the link budget analysis. R.Y. Zhan replied that the link budget is given in 07/698r5.
- 4 Doc. 08/584 “DF00 Beamforming Related Comment Resolutions: Part 1” presented by J. Wang.
  - 4.1 N. Livneh asked if there are any simulation results for the beamforming procedure. J. Wang replied that the simulation is in progress and will be presented in other contributions.
- 5 Doc. 08/586r0 “Resolution to Comment ID # 401 on FCS” presented by M.A Rahman”.
  - 5.1 No questions on the presentation.
- 6 Doc. 08/587r0 “Comment Resolutions related to PHY” presented by T. Baykas.
  - 6.1 No questions on the presentation.