

**Memo of Tele-Conference Call for TG3c, 2008 Feb 20**

**Date:** Feb 20<sup>th</sup>, 2008, 9.00am in JST

**Attendees:**

Edwin Kwon, Jisung Oh, Su-Khiong Yong (Samsung), Michael Sim, Raymond Yu Zhan (Panasonic), Makoto Noda, Hiroyuki Yamagishi (Sony), James Gilb (Sibeam), Abby Mathew (NewLANs), Bruce Bosco (Motorola), Ismail Lakkis (Tensorcom), Jason Trachewsky (Broadcom), Mark Grodzinsky (Wilocity), Yongsun Kim (ETRI), Yasunamo Katayama (IBM), Rick Roberts (Intel), Shuzo Kato, Hiroshi Harada, Akio Iso, Fumihide Kojima, Ryuhei Funada, Ryota Kimura, Zhou Lan, Chang-woo Pyo, Junyi Wang, Chin-Sean Sum (NICT)

**Action Item:**

1. James Gilb will complete and upload the baseline document DF1 in a few days.
2. James Gilb will prepare a discussion list for March 4 teleconference.
3. The assignees will provide the materials for discussions on the assigned tasks in doc. 08/0020r3 in the March 4 Teleconference, 24 hours in advanced.

**Next Meeting:**

March 4, 2008, 6.00am in PST, 11.00pm in JST.

1.5 hours duration

**What discussed:**

- 1 Updates on the progress of baseline document DF1.
  - 1.1 James Gilb requires several more days to complete and upload the baseline document DF1.
- 2 Discussions on the assigned tasks for the comments listed in doc. 08/0020r3.
  - 2.1 The time plan for each task (40 tasks in total) was discussed one by one.
  - 2.2 Discussions will be carried out for the tasks in the March 4 teleconference. James Gilb will prepare the discussion list.
  - 2.3 Most tasks will be addressed on March 4, others will be addressed in the Orlando meeting.
- 3 The update of each task is given as below. For the complete table, kindly refer to doc. 08/0020r3.

| No. | Task   | Updates  |
|-----|--|--|
| 1   | The equation for the FFT period in the OFDM PHY is wrong for LRP and HRP modes   | Completed by James Gilb  |
| 2   | Do we need a capability bit that indicates a DEV is MMC PNC capable?   | <ul style="list-style-type: none"> <li>- Materials uploaded before March 4</li> <li>- Discussion in March 4 teleconference</li> <li>- Try to close in Orlando Meeting</li> </ul> |
| 3   | Need to describe when the LRP is used.   | As above   |
| 4   | Keep references to 2.4 GHz, add reference to mmWave PHY.   | As above   |
| 5   | Do we need reserved stream indices for beamforming and channel probing.  | As above   |
| 6   | Does the resolution of the superframe timing need to be less than 1 us?  | As above   |
| 7   | Will Dly-ACK do what is necessary for Blk-ACK or are there unique things that Blk-ACK needs to do. Also, can this concept be extended to include the AV PHY directional ACK. | As above   |
| 8   | Do we add SIFS and MIFS capabilities here or in another information element.   | As above   |
| 9   | How do we encode all of the supported data rates.  | As above   |
| 10  | We need to define the preferred fragment size mapping for each of the PHY modes or possibly one for all PHY modes.   | As above   |
| 11  | How do DEVs know when the superframe starts and when the last beacon ends if they receive one beacon in the middle of a set of beacons.                                      | As above   |
| 12  | How does a DEV know when the first symbol of the beacon is sent when there is repetition coding.   | As above   |
| 13  | Is this IE needed in light of the contributions on beamforming. If so, does it have the correct information.   | As above   |
| 14  | Can we update this IE to include all of the information useful for beam formed as well as sectorized antennas? What additional information is                                | As above   |

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|    | required?  |  |
| 15 | Are these the right set of commands?   | As above   |
| 16 | What is the definition of the value of the Channel Status Information field?   | As above   |
| 17 | Can this be done with an information element? Also, there are some updates to the frame format that need to be reviewed.   | As above   |
| 18 | Why is handover optional? Should it be restricted to certain cases.  | As above   |
| 19 | Need rules to describe that the beacon PHY mode shall not change while in operation. Also, that on handover, the new PNC uses the same PHY mode for the beacon as the old PNC. If so, we may be able to leave PNC Des-Mode as the top criteria for handover. | As above   |
| 20 | Add requirement that MMC PNCs implement the common mode.   | As above   |
| 21 | What PHY mode is used in the CAP   | As above   |
| 22 | Add a description of the MMC PNC to Clause 5 in relation to the beaconing and the CAP.   | James Gilb and sub-editors will work on it   |
| 23 | Each PHY needs to explicitly define the base rate that will be used  | <ul style="list-style-type: none"> <li>- Materials uploaded before March 4</li> <li>- Discussion in March 4 teleconference</li> <li>- Try to close in Orlando Meeting</li> </ul> |
| 24 | The PHY mode names will be SC (single carrier), HSI (high speed interface), AV (audio/video), alternative: SC, MC1, MC2  | James Gilb will work on it   |
| 25 | Move the new text in this subclause to the informative annex.  | James Gilb and sub-editors will work on it   |
| 26 | Can all three PHY modes use the same SIFS and list this in the capabilities field to be used in an CTA.  | <ul style="list-style-type: none"> <li>- Materials uploaded before March 4</li> <li>- Discussion in March 4 teleconference</li> <li>- Try to close in</li> </ul>                 |

|    |   | Orlando Meeting |
|----|---|-----------------|
| 27 | Do we allow multiple beacons? If so, are they restricted to one PHY mode? Do we allow multiple beacons for sectored antenna applications.   | As above        |
| 28 | Can we unify the use of FCS's and types of FCS?   | As above        |
| 29 | Can we unify the aggregation?   | As above        |
| 30 | Do we use one or two HCS for the headers, including the extended MAC header.  | As above        |
| 31 | The rules for Blk-ACK need to be filled out.  | As above        |
| 32 | Table 58a does not need any changes.  | As above        |
| 33 | Work on a unified beamforming submission.   | As above        |
| 34 | Can the SC and HSI PHY use a single preamble format?  | As above        |
| 35 | There needs to be a way for the upper layer that is the source of data to say if the use of UEP is allowed for the data stream.   | As above        |
| 36 | Rather than using commands, if the UEP capabilities are exchanged as part of the normal capabilities exchange, then the commands are not needed.  | As above        |
| 37 | The section repeats information from the channel time request for command.  | As above        |
| 38 | Can we use the existing facilities in 802.15.3b to accomplish this in a manner that improves the performance.   | As above        |
| 39 | This is probably very efficient when both sides are sectorized. However, when one side is not, regular beamforming would need to be used. Keep this section in mind when reviewing beamforming. | As above        |
| 40 | It is better to use two different HCS for combined PHY and MAC header and MAC subheader   | As above        |