802.16m Preamble RG Report

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Preamble RG Chairs

Venue:

Denver 802 Plenary

Base Contribution:

IEEE 802.16m-08/023, Charter and Scope of New TGm Rapporteur Groups

Purpose:

Report on the activity of the TGm chartered Preamble Rapporteur Group

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The Preamble RG Status

- The RG was formed in session #55.
- There were total 14 contributions related to Preamble.
- Two important documents were created from the RG, the Preamble requirements document (C80216m-Preamble-08_019) and the SDD text input for Preamble (C80216m-Preamble-08_004).
- The Requirements document was used to speed up the discussion on the reflector. The SDD text input is the contribution from the RG for the SDD text.

Contributions received

Contributors	Affiliations	File reference
Y. Sun, T. Aoki	Toshiba	C80216mPreamble- 08_004_Yong_Sun_Toshiba
Y. Choi, S. Azizi	Intel	C80216mPreamble-08_0017
Y. Choi, S. Ahmadi, X. Yang, A. Papathanassiou, S. Timiri, Y. Lomnitz	Intel	C80216mPreamble-08_005r1
W. Burchill. K. Holt, R. Khalona	Nextwave	C80216mPreamble-08_006r1
R. Novak, M. Fong, S. Vrzic, J. Yuan, D. Yu, S. Kim, K. Sivanesan	Nortel	C80216mPreamble-08_007
Pei-Kai Liao, P. Cheng	Mediatek	C80216m-Preamble-08_008r1
S. Changyin, L. Min, W. Wenhuan, Y. Ke, Y. Qiuxing, F. Huiying, Q. Hongyun	ZTE	C80216m-Preamble-08_009
Zheng Yan-Xiu, Ren-Jr Chen, Chang-Lan Tsai, Chung-Lien Ho, Richard Li, Yu-Tao Hsieh	ITRI	C80216m-Preamble-08_0010
M. Sun, Y. Yang, X. Gu, C. Liu, X. Chang	Huawei	C80216m-Preamble-08_011
S. Moon, S. Han, J. S. Kwak, Y. Kwon	LGE	C80216m-Preamble-08_012r1
C. Williams, K. Power	Fujitsu	C80216m-Preamble-08_013
S. Park, S. Hong, S. Choi, C. Lim, J. Cho, J. Cho, H. Kang, H. Choi, DS Park	Samsung	C80216m-Preamble-08_014
Z. Li, A. Boariu, S. Maheshwari	Nokia	C80216m-Preamble-08_015
S. Lee, C.l Yeh, D. Kwon, Y. Song, B. Kwak, J. Kim, W. Shin	ETRI	C80216m-Preamble-08_016

The Procedure for the Preamble SDD text

- Three drafts are worked on to lead to the final contribution from the Preamble RG
 - Draft one: Table of content of Preamble. An initial spreadsheet
 (C80216m-PREAMBLE-08_002) was issued to assist
 - Draft two: The first draft of SDD text for preamble section. This draft compiled the text input from the Preamble contributions previously listed. A further spreadsheet was issued (C80216m-Preamble-08_020) to assist in harmonization
 - Draft three: RG chairs edited all the consensus text and different options from these contribution inputs and issued a "call for comments" on this draft.
 - Only 2 comments received, which were technical, but text was amended to clarify understanding

Discussion Points

- Through the e-mail reflector key topics discussed included:
 - Agreement to use the term synchronisation channel (SCH),
 since 'preamble' presupposes the location
 - Hierarchical vs. non-hierarchical design
 - The number of cell IDs required
 - Use of legacy preamble
 - Position of the synchronisation channel in frequency for multicarrier/multibandwidth systems
 - Support for channel estimation and MIMO transmissions

Current Status

- A "call for comments" on the draft 3 of SDD text input and Preamble requirements document was issued on 7/7/08.
- The responses to the "call for comments" is due on 7/9/08. After that, a "call for reply comment" will be issued.
- Reply comments are due noon Denver local time 7/14/09