Project	IEEE 802.16 Broadband Wireless Access Working Group <**http://ieee802.org/16**>
Title	Comments on the TOC of Task Group Working Document [1]
Date Submitted	2006-09-19
Source(s)	

Yousuf Saifullah, Shashikant Maheshwari, Peter Wang. Nokia Inc. 6000 connection Dr. Irving, TX 75039, USA	Voice: +19728945000 Yousuf.Saifullah@nokia.com
Kanchei (Ken) Loa, Yung-Ting Lee, Frank C.D. Tsai, Youn-Tai Lee, Heng-Iang Hsu, Yi-Hsueh Tsai, Hsien-Tsung Hsu, and Hua-Chiang Yin. Institute for Information Industry 8F., No. 218, Sec. 2, Dunhua S. Rd., Taipei City 106, Taiwan, ROC.	Voice: +886-2-2739-9616 Fax: +886-2-2378-2328 loa@nmi.iii.org.tw
Jun Bae Digital Business Division / SOLiD Technologies, Inc.	Voice: 02-2142-3861 / M : 016-367-3138 Fax: 02-2142-3999 E-mail : jbahn@st.co.kr
Djamal-Eddine Meddour FT/RD/CORE/M2I Lab 2, avenue Pierre Marzin 22307 Lannion Cedex - France	Tel : + 33 (0)2 96 05 29 36 Fax : + 33 (0)2 96 05 14 70 djamal.meddour@orange-ft.com
Peng-Yong Kong, Haiguang Wang, Yu Ge and Chen-Khong Tham. Institute for Infocomm Research 21 Heng Mui Keng Terrace 119613 Singapore	Tel: +65-68748530 Email: kongpy@i2r.a-star.edu.sg
D. J. Shyy	Voice: +1-703-983-6515

MITRE
7515 Colshire Drive
McLean, VA 22102, USA
djshyy@mitre.org

Arnaud TONNERRE
THALES Communications
146 Boulevard de Valmy
Colombes, France
Arnaud.TONNERRE@fr.thalesgroup.com

Re:	
Abstract	Proposes changes on the baseline ToC (C80216j-06_017r1.pdf)
Purpose	This contribution is in response to call for comments as advertised in C80216j-06_018.pdf
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures <http://ieee802.org/16/ipr/patents/policy.html>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:chair@wirelessman.org> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/notices>.

Comments on the Table of Contents of Task Group Working Document

~~Mike Hart & JungJe Son~~

~~Relay TG Editors~~

Introduction

This document is provided in response to the authorization of the TG editors through a motion passed by the Relay TG at session #44 to draft an initial Table of Contents of the Task Group working document.

As this is an editorial task, the number of sections taken from the existing standards documents (IEEE Std. 802.16-2004, IEEE Std. 802.16e-2005, IEEE Std. 802.16-2004/Cor1-2005) is kept to those that can be considered as obvious. These are sections that already exist where at a minimum clarification would be required to explain the impact of the introduction of a relaying mechanism and/or a relaying entity (i.e. relay station) on the existing features. Similarly, new sections are also added where MMR specific procedures are needed.

This ToC is a guideline document. It does not provide an exhaustive list of sections. It is possible that some of these sections may be found unnecessary, and some other new section may be added, as the 802.16j draft matures.

~~It is the view of the editors that determining whether or not further sections should be added requires some technical decisions to be made. Furthermore, as the editors were specifically instructed to create the ToC based on the existing standard, it is outside of their power to propose new sections at this time.~~

~~Consequently, an extensive list of sections is not provided at this point in time and it is left to the Task Group through comments and contributions in Session #45 to build on this basic list to work towards developing an initial Table of Contents for the Project 802.16j Baseline Task Group Document.~~

Table of Contents

1. Overview
1.1 Scope
1.2 Purpose
1.3 Frequency bands
1.3.4 Air interface nomenclature and PHY compliance
1.4 Reference model

2. References

3. Definitions

4. Abbreviations and acronyms

6. MAC common part sublayer
6.1 PMP

6.1.1 Mobile multi-hop relay (MMR)
6.3 Data/Control plane
6.3.1 Addressing and connections
6.3.1.3 MMR addressing and connections
6.3.2 MAC PDU formats
6.3.3 Construction and transmission of MAC PDUs
6.3.3.8 MMR support
6.3.4 ARQ mechanism
6.3.4.7 MMR ARQ mechanism
6.3.6 Bandwidth allocation and request mechanisms
6.3.6.7 MMR support
6.3.7 MAC support of PHY
6.3.7.7 MMR support
6.3.8 Contention resolution
6.3.8.2 Contention resolution for MMR
6.3.9 Network entry and initialization
6.3.9.16 MMR network entry and initialization
6.3.9.16.1 RS capability
6.3.9.16.2 RS registration
6.3.10 Ranging
6.3.10.3 OFDMA-based ranging
6.3.10.3.4 MMR OFDMA-based ranging
6.3.11 Update of channel descriptors
6.3.12 Assigning SSs to multicast groups
6.3.12.1 MMR support
6.3.13 Establishment of multicast and broadcast transport connections
6.3.13.1 MMR support
6.3.14 QoS
6.3.14.10 MMR support
6.3.17 MAC support for HARQ
6.3.17.5 MMR HARQ mechanism
6.3.18 DL CINR report operation
6.3.18.3 DL CINR report for RS
6.3.19 optional Band AMC operations using 6-bit CQICH encoding
6.3.21 Sleep mode for mobility-supporting MS
6.3.21.1.7 MMR support for sleep mode
6.3.22 MAC layer handover procedures
6.3.22.4 MMR support for handovers
6.3.23 Multicast and broadcast services (MBS)
6.3.24 MS Idle Mode (optional)
6.3.24.10 MMR support for MS idle mode
6.3.25 MMR scheduling mechanism
6.3.26 MMR power control
6.3.27 Mobile RS Handover
6.3.28 RS neighbor detection, maintenance and deletion
6.3.29 MMR path management

6.3.29.1 Primary relay path selection and maintenance
6.3.29.2 Multiple relay path selection, maintenance and use
6.3.30 MMR routing
6.3.31 MMR power saving mode

7. Security sublayer
7.1 Architecture
7.2 PKM protocol
7.3 Dynamic SA creation and mapping
7.4 Key usage
7.5 Cryptographic methods
7.6 Certification profile
7.7 Pre-Authentication
7.8 PKMv2
7.10 Security consideration for MMR
7.10.1 Fixed/Nomadic RS
7.10.2 Mobile RS

8. PHY
8.4 WirelessMAN-OFDMA PHY layer
8.4.1 Introduction
8.4.4 Frame structure
8.4.4.6 Optional AAS support
8.4.4.6.5 AAS support for MMR
8.4.4.8 MMR frame structure
8.4.5 Map message fields and IEs
8.4.5.9 MMR map message
8.4.7 OFDMA ranging
8.4.7.5 MMR OFDMA ranging
8.4.8 Space-Time Coding (optional)
8.4.8.10 STC support for MMR
8.4.9 Channel coding
8.4.9.8 Optional advanced modulation and coding for MMR
8.4.10 Control mechanisms
8.4.10.3 Power control
8.4.11 Channel quality measurements
8.4.11.5 Channel quality measurements for MMR
8.4.12 Transmitter requirements
8.4.13 Receiver requirements
8.4.13.4 Synchronization requirements for MMR
8.4.14 Frequency control requirements
8.4.15 Optional HARQ support
8.4.16 Antenna type for MMR

9. Configuration

10. Parameters and constants
<The existing tables and sub-sections will be enhanced/modified for MMR>
10.1 Global values
10.2 PKM parameter values
10.3 PHY-specific values
10.4 Well-known addresses and identifiers

11. TLV Encodings
<TLVs will be added as per changes in the MAC messages>

Reference

[1] IEEE 802.16j-06/017r1, "TOC of Task Group Working Document" by Mike Hart & JungJe Son.