# Proposed Table of Contents on IEEE 802.16n [802.16Rev3-based]

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<th>Project</th>
<th>IEEE 802.16 Broadband Wireless Access Working Group</th>
<th>[<a href="http://iee802.org/16">http://iee802.org/16</a>]</th>
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<tr>
<td>Date Submitted</td>
<td>2011-09-21</td>
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<td>Source(s)</td>
<td>Eunkyung Kim, Sungcheol Chang, Won-Ik Kim, Seokki Kim, Sungkyung Kim, Miyoung Yun, Hyun Lee, Chunsik Yoon, Kwangjae Lim ETRI Anh Tuan Hoang, Wai Leong Yeow I2R Hoang Vinh Dien NICT</td>
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<tr>
<td>Re:</td>
<td>“IEEE 802.16n-11/0013r1,” in response to Call for Comments on 802.16n (GRIDMAN) AWD</td>
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<tr>
<td>Abstract</td>
<td>TOC on IEEE 802.16n Amendment Draft Standard</td>
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<tr>
<td>Purpose</td>
<td>To discuss and adopt the proposed text in the draft amendment document on 802.16n</td>
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<td>Notice</td>
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Proposed Table of Contents on IEEE 802.16n [802.16Rev3-based]

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1. Introduction

This document provides in response to the agreement of TGn at session #74 to separate the current AWD into two documents which are based on 802.16Rev3[2] and 802.16.1[3]. This document provides a proposed TOC for new AWD based on the 802.16Rev3. This contribution proposes new subclauses, in blue colored text, for HR-Network.

However, it is understood that during the course of standards development, some of these new sections may be deemed unnecessary, in which case they will be deleted. Similarly, new sections may be added if deemed necessary. Editorial remarks are shown in italic with square bracket. Note that editorial remarks are meant to be informative only.

2. References


3. Proposed ToC on the IEEE 802.16n Amendment Draft Standard

[----------------------------------------------------------Start of Text Proposal-----------------------------------------------]
1. Overview

2. Normative References

[Insert new references.]

3. Definitions

[Insert new definitions for HR at the end of this section. Definition for HR shall include Mobile Base Station, Infrastructure Station (including HR-BS or HR-RS), and HR Station (including HR-MS, HR-BS, or HR-RS).]

4. Abbreviations and Acronyms

[Insert new abbreviation and acronyms for HR.]

5. Service-specific CS

6. MAC common part sublayer

6.3 MAC PDU formats

6.3.2.3 MAC management messages

6.3.2.3.x MAC management messages for HR-Network
[Comment:

1. Add new MAC management messages for HR-Network as a subsection in 6.3.2.3.x

2. Rule of Re-Naming

Should insert the “AAI” prefix for the messages based on the 16.1 but any prefix is not needed for 16Rev3.

for example, (Note: xxx is the name of message such as REQ/RSP...)

6.3.2.3.x.1 AAI-DC-REQ (Direct Communication REQuest) message

AAI-MM-RS-REQ (Multi-Mode Relay Station REQuest) message

AAI-PM-xxx (Path Management)

AAI-FN-xxx (Forwarding To network)

AAI-SA-xxx (StandAlone)

AAI-SC-xxx (Self-Coexistence)

AAI-HR-xxx (not above)

DC-Req (Direct Communication Request) message

MM-RS-REQ (Multi-Mode Relay Station REQuest) message

PM-xxx (Path Management)

FN-xxx (Forwarding To network)

SA-xxx (StandAlone)

SC-xxx (Self-Coexistence)

HR-xxx (not above)

]
7. Security sublayer

8. Physical layer (PHY)

8.4 WirelessMAN-OFDMA PHY

9. Configuration

10. Parameters and constants

11. TLV encodings

12. System profiles

13. MIB modules

14. Management interfaces and procedures

15. Mechanisms for coordinated coexistence

16. Support for HR-Network

[Describe all functional operation in 802.16n in this section]
16.1 Multi-mode operation

[move all text in 17.2.1 into this subsection]

16.1.1 Relay function for HR-BS

16.1.2 Relay function for HR-MS

16.1.3 Base station function for HR-MS

16.2 Support for Direct Communication between HR-MSs

[Move all text in 17.2.2 into this subsection]

16.2.1 General Description

[Comment: should describe following general concept in this subsection:

1. define three use cases (1, 2, & 3)

2. list 3 approaches (BS-controlled, Talk-around, and Coordinator based DC)

2.1 BS-controlled covers case 1 & 2 in 16.2.2

2.2 Talk-around covers all cases in 16.2.3

2.3 Coordinator based covers case 3 in 16.2.4

]

16.2.2 BS-controlled DC

[Move all text in 17.2.2.2-17.2.2.5 and 17.2.2.7 into this subsection]

16.2.2.1 Medium access control

16.2.2.2 Physical layer

16.2.3 Talk-around DC

[Move all text in 17.2.2.6 into this subsection]
16.2.3.1 Medium access control
16.2.3.2 Physical layer
16.2.4 Coordinator based DC

16.3 Support for HR-MS Forwarding to Network

[Move all text in 17.2.3 into this subsection]

16.3.1 General Description

16.3.2 BS-controlled FTN

[Move all text in 17.2.3.2 - 17.2.3.4 into this subsection]

16.3.2.1 Medium access control
16.3.2.2 Physical layer

16.3.3 Talk-around FTN

[Add FTN operation under Talk-around DC into this subsection]

16.3.3.1 Medium access control
16.3.3.2 Physical layer

16.4 Support for Standalone Network

[Move all text in 17.2.4 into this subsection]

16.5 Support for High Reliable Relaying

[move all text in 17.2.5 into this subsection]
16.6 Support for Local Forwarding

[move all text in 17.2.6 into this subsection. Note: currently 17.2.6 is empty.]

16.7 Support for Path Management against Degraded Network

[move all text in 17.2.7.2 into this subsection. Note-17.2.7.1 is related to DC/FTN. Thus, those subsections are expected to move to DC & FTN subsection]

16.7.1 Alternative Path Management

[alternative path management, including preparation, switching the active path, and maintain]

16.7.1.1 Alternative Path Preparing

16.7.1.2 Alternative Path Switching

16.7.1.3 Alternative Path Maintaining

16.7.2 Reliable HO

16.7.3 Forwarding between HR-Infrastructure stations

16.8 Support for Priority Access Operation

[move all text in 17.2.8 into this subsection. Note-currently 17.2.8 is empty.]

16.9 Support for Multicast

[move all text in 17.2.9 into this subsection]

16.9.1 Multicast Communication Operation

16.9.2 Multicast Protocol Features and Functions

16.9.3 Multicast Key Management
16.10 Support for Security

[move all text in 17.2.10 into this subsection]

16.10.1 Security Procedure for Secure DC

16.10.1.1 Security Procedure for BS-controlled Secure DC

16.10.1.2 Security Procedure for Talk-around Secure DC

16.10.2 Security Procedure for Secure Multicast Operation

16.11 Support for Self-Coexistence

[move all text in 17.2.11 into this subsection]

16.11.1 Self-coexistence cycle

16.11.2 Frame structure

16.11.3 Operation modes

16.11.4 Self-coexistence Beacon Protocol (SCBP)

16.11.5 Mechanism for self-coexistence of multiple HR cells

16.12 Support for Downlink High Reliability and Uplink Heavy Data Service

[Move all text in 17.2.12 into this subsection]

Annexes

[-------------------------------------End of Text Proposal-------------------------------------]