Project	IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16 >	
Title	Proposed Table of Contents on IEEE 802.16n [802.16.1-based]	
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Re:	"IEEE 802.16n-11/0013r1," in response to Call for Comments on 802.16n (GRIDMAN) AWD	
Abstract	TOC on IEEE 802.16n Amendment Draft Standard	
Purpose	To discuss and adopt the proposed text in the draft amendment document on 802.16n	
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Proposed Table of Contents on IEEE 802.16n [802.16.1-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 802.16.1.

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

- [1] IEEE 802.16n-11/0015, 802.16n Amendment Working Draft, August 2011.
- [2] IEEE P802.16Rev3/D1, IEEE Draft Standard for Local and metropolitan area networks; Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems," August 2011.
- [3] IEEE P802.16.1TM/D1, [Draft] WirelessMAN-Advanced Air Interface for Broadband Wireless Access Systems, August 2011.

[------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. WirelessMAN-Advanced Air Interface

6.1 Introduction

6.2 Medium access control

- 6.2.1 Addressing
- 6.2.2 MAC PDU formats
- **6.2.3 MAC Control messages**

6.2.3.x MAC Control messages for HR-Network

[Comment:

- 1. Add new MAC control messages for HR-Network as a subsection in 6.2.3.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...)

6.2.3.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)
]
6.3 Physical layer
6.4 Support for Femto ABS
6.5 Multi-BS MIMO
6.6 Support for relay
6.7 Support for self-organization
6.8 Support for location-based service (LBS)
6.9 Support for Enhanced Multicast Broadcast Service
6.10 Support for Advanced Air Interface in LZone
6.11 Global values
```

6.12 Support for HR-Network

[Describe all functional operation in 802.16n in this section]

6.12.1 Multi-mode operation

[move all text in 17.3.1 into this subsection]

6.12.1.1 Relay function for HR-BS

6.12.1.2 Relay function for HR-MS

6.12.1.3 Base station function for HR-MS

6.12.2 Support for Direct Communication between HR-MSs

[Move all text in 17.3.2 into this subsection]

6.12.2.1 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 6.12.2.2
- 2.2 Talk-around covers all cases in 6.12.2.3
- 2.3 Coordinator based covers case 3 in 6.12.2.4

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6.12.2.2 BS-controlled DC

[Move all text in 17.3.2.2-17.3.2.5 and 17.3.2.7 into this subsection]

6.12.2.2.1 Medium access control

6.12.2.2.2 Physical layer

6.12.2.3 Talk-around DC

[Move all text in 17.3.2.6 into this subsection]

6.12.2.3.1 Medium access control

6.12.2.3.2 Physical layer

6.12.2.4 Coordinator based DC

6.12.3 Support for HR-MS Forwarding to Network

[Move all text in 17.3.3 into this subsection]

6.12.3.1 General Description

6.12.3.2 BS-controlled FTN

[Move all text in 17.3.3.2 - 17.3.3.4 into this subsection]

6.12.3.2.1 Medium access control

6.12.3.2.2 Physical layer

6.12.3.3 Talk-around FTN

[Move all text in 17.3.3.5 into this subsection]

6.12.3.3.1 Medium access control

6.12.3.3.2 Physical layer

6.12.4 Support for Standalone Network

[Move all text in 17.3.4 into this subsection]

6.12.5 Support for High Reliable Relaying

[move all text in 17.3.5 into this subsection]

6.12.5.1 Relaying connection notifications over an alternative interface

6.12.6 Support for Local Forwarding

[move all text in 17.3.6 into this subsection]

6.12.7 Support for Path Management against Degraded Network

[move all text in 17.3.7.2 into this subsection. Note-17.3.7.1 is related to DC/FTN. Thus, those subsections are expected to move to DC & FTN subsection]

6.12.7.1 Alternative Path Management

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

6.12.7.1.1 Alternative Path Preparing

6.12.7.1.2 Alternative Path Switching

6.12.7.1.3 Alternative Path Maintaining

6.12.7.2 Reliable HO

6.12.7.3 Forwarding between HR-Infrastructure stations

6.12.8 Support for Priority Access Operation

[move all text in 17.3.8 into this subsection. Note-currently 17.3.8 is empty.]

6.12.9 Support for Multicast

[move all text in 17.3.9 into this subsection]

6.12.9.1 Multicast Communication Operation

6.12.9.2 Multicast Protocol Features and Functions

6.12.9.3 Multicast Key Management

6.12.10 Support for Security

[move all text in 17.3.10 into this subsection]

6.12.10.1 Security Procedure for Secure DC
6.12.10.2 Security Procedure for BS-controlled Secure DC
6.12.10.3 Security Procedure for Talk-around Secure DC
6.12.10.4 Security Procedure for Secure Multicast Operation
6.12.11 Support for Self-Coexistence
[move all text in 17.3.11 into this subsection]
6.12.11.1 Self-coexistence cycle
6.12.11.2 Frame structure
6.12.11.3 Operation modes
6.12.11.4 Self-coexistence Beacon Protocol (SCBP)
6.12.11.5 Mechanism for self-coexistence of multiple HR cells
Annexes
[End of Text Proposal]