|  |  |  |
| --- | --- | --- |
| Project | **IEEE 802.16 Broadband Wireless Access Working Group <**<http://ieee802.org/16>**>** | |
| Title | ***Clarification on relay link release of HR-MS in GRIDMAN AWD for 802.16Rev3*** | |
| Date Submitted | **2012-01-10** | |
| Source(s) | Seokjoo Shin  Chosun University  Won-Ik Kim, Eunkyung Kim, Sungkyung Kim, Sungcheol Chang, Miyoung Yun, Seokki Kim, Hyun Lee, Chulsik Yoon, Kwangjae Lim  ETRI | E-mail:  [sjshin@chosun.ac.kr](mailto:sjshin@chosun.ac.kr)  [woniks@etri.re.kr](mailto:woniks@etri.re.kr)  [scchang@etri.re.kr](mailto:scchang@etri.re.kr) |
| Re: | “IEEE 802.16n-11/0025,” in response to the 802.16n (GRIDMAN) AWD Call for Comments | |
| Abstract | This contribution is a proposal related to multimode operation in IEEE 802.16Rev3 to be consistent with 802.16.1a. | |
| Purpose | To discuss and adopt the proposed text in the AWD of 802.16n | |
| Notice | *This document does not represent the agreed views of the IEEE 802.16 Working Group or any of its subgroups*. It represents only the views of the participants listed in the “Source(s)” field above. It is offered as a basis for discussion. It is not binding on the contributor(s), who reserve(s) the right to add, amend or withdraw material contained herein. | |
| Copyright Policy | The contributor is familiar with the IEEE-SA Copyright Policy <http://standards.ieee.org/IPR/copyrightpolicy.html>. | |
| Patent Policy | The contributor is familiar with the IEEE-SA Patent Policy and Procedures:  <<http://standards.ieee.org/guides/bylaws/sect6-7.html#6>> and <<http://standards.ieee.org/guides/opman/sect6.html#6.3>>.  Further information is located at <<http://standards.ieee.org/board/pat/pat-material.html>> and <<http://standards.ieee.org/board/pat>>. | |

**Clarification on relay link release of HR-MS in GRIDMAN AWD for 802.16Rev3**

Seokjoo Shin

Chosun University

Won-Ik Kim, Eunkyung Kim, Sungkyung Kim, Sungcheol Chang, Miyoung Yun, Seokki Kim, Hyun Lee, Chulsik Yoon, Kwangjae Lim

ETRI

# Introduction

IEEE 802.16n AWD for 802.16Rev3 describes MM-RL-REQ (multimode release request) message in Section 6.3.2.3.98.4. In this contribution, we propose a modified MM-RL-REQ message which is transmitted by HR-MS acting as relay to release relay mode. In the current message, the reason why the HR-MS acting as relay wants to release its relay mode is not defined in the current documents. If a HR-MS acting as relay reports the reason of release to its superordinate HR-BS, the superordinate HR-BS may react more efficiently.

# Proposed Texts

Note:

The text in **BLACK** color: the existing text in the 802.16n Amendment Draft Standard

The text in **~~RED~~** color: the removal of existing 802.16n Amendment Draft Standard Text

The text in **BLUE** color: the new text added to the 802.16n Amendment Draft Standard Text

[-------------------------------------------------Start of Text Proposal---------------------------------------------------]

**[*Remedy1: Adopt the following change in Section 6.3.2.3.98.4 in the GRIDMAN AWD for 802.16Rev3.*]**

**6.3.2.3.98.4 MM-RL-REQ (multimode release request) message**

HR-MS transmits MM-RL-REQ message for the purpose as follows:

- to release its relay mode and to return its original role

- to response or reject the unsolicited MM-RL-RSP message by the HR-BS

**Table 1004 – MM-RL-REQ message format**

|  |  |  |
| --- | --- | --- |
| **Syntax** | **Size**  **(bit)** | **Notes** |
| MM-RL-REQ message format () { | — | — |
| Management Message Type = xx+3 | 8 | — |
| Release request code | 2 | Used to indicate the purpose of this message  0b00: multimode release  0b01: response for the unsolicited MMRL-RSP message by HR-BS  0b01: reject for the unsolicited MM-RLRSP message by HR-BS. This code is applicable only when UL data is pending to transmit.  0b11: reserved |
| *Reserved* | 6 | Shall be set to zero. |
| TLV encodings for MM-RL-REQ | variable | TLV-specific |
| } |  |  |

All parameters are coded as TLV tuples, as defined in 11.32.3.

The following parameter shall be included in the MM-RL-REQ message when the Release request code is set to 0b00 in MM-RL-REQ:

**Release Reason Code**

to indicate the reason why HR-MS acting as relay wants to release its relay mode.

**[*Remedy2: Insert the following sub-section in Section 11.32 in the GRIDMAN AWD for 802.16Rev3.*]**

**11.32.3 MM-RL-REQ message encodings**

The encodings described in this subclause are specific to the MM-RL-REQ message (6.3.2.3.98.4).

**Table xxx – MM-RL-REQ message encodings**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Type** | **Length** | **Value** |
| Release Reason Code | 1 | 1 | Bit 0: battery is reaching to the predefined threshold level  Bit 1: interference level exceed the tolerable level  Bit 2: normal power off is initiated  Bit 3-7: reserved |

**[*Remedy3: Modify the following sub-section numbers in Section 11.32 in the GRIDMAN AWD for 802.16Rev3.*]**

**~~11.32.3~~ 11.32.4 MM‐RL‐RSP message encodings**

…

**~~11.32.4~~ 11.32.5 MM‐BS‐REQ message encodings**

…

**~~11.32.5~~ 11.32.6 MM‐BS‐RSP message encodings**

…

**~~11.32.6~~ 11.32.7 MM‐BS‐CMD message encodings**

…

**[*Remedy4: Modify the following sub-section numbers in the GRIDMAN AWD for 802.16Rev3.*]**

***[Change sub-section number as indicated: page#22, line#2]***

All parameters are coded as TLV tuples, as defined in ~~11.32.3~~ 11.32.4.

***[Change sub-section number as indicated: page#29, line#10]***

All parameters according to BS configuration indication are coded as TLV tuples, as defined in ~~11.32.4~~ 11.32.5.

***[Change sub-section number as indicated: page#31, line#15]***

All parameters according to action code are coded as TLV tuples, as defined in ~~11.32.5~~ 11.32.6.

***[Change sub-section number as indicated: page#32, line#10]***

All parameters according to action code are coded as TLV tuples, as defined in ~~11.32.6~~ 11.32.7.

**[*Remedy5: Modify the following sub-section numbers in the GRIDMAN AWD for 802.16Rev3.*]**

***[Change sub-section number as indicated: page#19, line#32]***

All parameters are coded as TLV tuples, as defined in ~~11.32.3~~ 11.32.2.

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