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| Project | IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 > | |
| Title | OFDMA Extended UIUC / Extended-2 UIUC Format and Code Assignments | |
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| Re: | This is a contribution to IEEE 802.16 maintenance. | |
| Abstract | There are two sections for the OFDMA extended UIUC, i.e., 8.4.5.4.4 and Section 8.4.5.4.24. Those two sections have exactly the same name, and they almost have the same contents, except for Extended or Extended-2 UIUC. Those two sections shall be combined. Also, the subsections in 8.4.5.4.24 shall be re-numbered. In addition, the extended UIUC code assignment is a big mess now. We propose to add extended UIUC code assignment tables to clean up this mess. | |
| Purpose | To unify two extended UIUC sections. | |
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Extended UIUC / Extended-2 UIUC

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1. Introduction

There are two sections for the OFDMA extended UIUC, i.e., 8.4.5.4.4 and Section 8.4.5.4.24. Those two sections have exactly the same name, and they almost have the same contents, except for the terms Extended or Extended-2 UIUC. Those two sections shall be combined. Also, the subsections in 8.4.5.4.24 shall be re-numbered. In addition, the extended UIUC code assignment is a big mess now. We propose to add extended UIUC code assignment tables to clean up this mess.

2. References

[16e/D6] IEEE P802.16e/D6, February 2005

3. Proposed Changes

To unify those two OFDMA extended UIUC sections and clean up the UIUC code assignment mess, the following changes are needed:

a) [page 271, line 39, insert the following:](#)

8.4.5.4.4 UL-MAP extended IE format

A UL-MAP IE entry with a UIUC value of 11 or 15, indicates that the IE carries special information and conforms to the structure shown in Table 291. A station shall ignore an extended IE entry with an extended UIUC value for which the station has no knowledge. In the case of a known extended UIUC value but with a length field longer than expected, the station shall process information up to the known length and ignore the remainder of the IE.

Table 291 OFDMA UL Extended IE format

| Syntax | Size | Notes |
|---------------------------------|----------|---|
| UL_Extended_IE { | | |
| Extended UIUC / Extended-2 UIUC | 4 bits | Extended UIUC if UIUC=15; Extended-2 UIUC if UIUC=11 |
| Length | 4 bit | Length in bytes of "unspecified data" field. |
| Unspecified Data | variable | |
| } | | |

8.4.5.4.4.1 Extended UIUC Assignments for UIUC=15

For the extended UL-MAP IEs with UIUC=15, the extended UIUC assignments are shown in Table 291a.

Table 291a Extended UIUC Assignments for UIUC=15

| Extended UL-MAP IE | Extended UIUC Value |
|--|---------------------|
| Power Control IE | 0x00 |
| Mini-subchannel allocation IE | 0x01 |
| AAS IE | 0x02 |
| CQICH allocation IE | 0x03 |
| UL zone switch IE | 0x04 |
| Physical Modifier IE | 0x05 |
| MIMO UL Basic IE | 0x06 |
| Anchor BS Switch IE | 0x07 |
| UL PUSC burst allocation in other segment IE | 0x08 |
| CQICH enhanced allocation IE | 0x09 |
| HO Anchor Active IE | 0x0a |
| HO Active Anchor IE | 0x0b |
| MIMO UL Enhanced IE | 0x0c |
| Fast_ranging_IE | 0x0d |
| Fast_tracking-IE | 0x0e |
| Feedback polling IE | 0x0f |

8.4.5.4.4.2 Extended-2 UIUC Assignments for UIUC=11

For the extended UL-MAP IEs with UIUC=11, the extended-2 UIUC assignments are shown in Table 291b.

Table 291b Extended-2 UIUC Assignments for UIUC=11

| Extended-2 UL-MAP IE | Extended-2 UIUC Value |
|-------------------------------|-----------------------|
| reserved | 0x00 |
| HARQ UL-MAP IE | 0x01 |
| HARQ ACK Region Allocation IE | 0x02 |
| UL Allocation Start IE | 0x03 |
| reserved | 0x04 to 0x0f |

- b) delete line 57 page 346 to line 24 on page 347.
- c) Renumber section 8.4.5.4.25 to 8.4.5.3.24.
- d) Renumber all the following sections by decreasing their last number by 1.