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| Source(s) | Hang Zhang, Peiyong Zhu, Mo-Han Fong, Wen Tong, David Steer, Gamini Senarath, G.Q. Wang, Derek Yu, Israfil Bahceci, Robert Sun and Mark Naden Nortel 3500 Carling Avenue Ottawa, Ontario K2H 8E9 | Voice: +613-763-1315 E-mail: wentong@nortel.com Voice: +613-765-898 E-mail: pyzhu@nortel.com |
| Re: | IEEE 802.16j-07/019: "Call for Technical Comments Regarding IEEE Project 802.16j" | |
| Abstract | The DL MAC control header is used for a MR-BS or a RS to send short control signaling. Using this proposed DL control MAC header and existing UL MAC header, instead of MAC management message, the system overhead caused by signaling of control and management can be reduced | |
| Purpose | To incorporate the proposed text into the P802.16j Baseline Document (IEEE 802.16j-06/026r4) | |
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DL R-MAC Control Header

Hang Zhang, Peiying Zhu, Mo-Han Fong, Wen Tong, David Steer, Gamini Senarath, G.Q. Wang,
Derek Yu, Israfil Bahceci, Robert Sun and Mark Naden

Nortel

1. Introduction

In this contribution, DL MAC control header is proposed to enable low-overhead control function in 802.16j.

2. Proposal

The DL MAC control header is used for a MR-BS or a RS to send short control signaling. Using this proposed DL control MAC header and existing UL MAC header, instead of MAC management message, the system overhead caused by signaling of control and management can be reduced.

The DL MAC control header format is designed as in Figure 1.

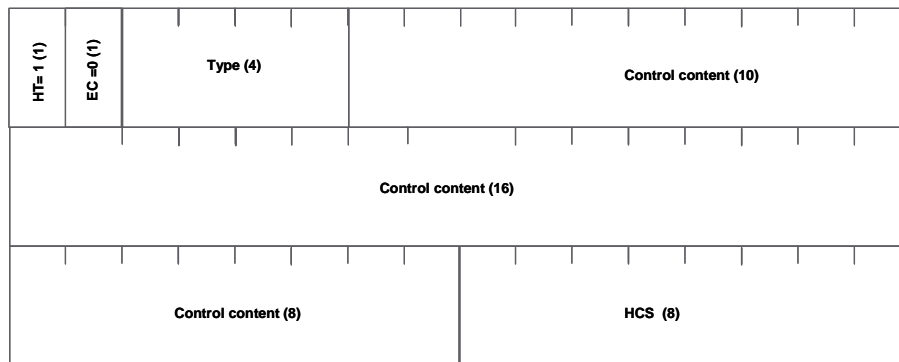


Figure 1. DL MAC control header.

The DL MAC control header fields are defined in Table 1.

| Name | Length (bits) | Description |
|-----------------|---------------|---------------------------------------|
| HT | 1 | Header type. Should be set to 1 |
| EC | 1 | Encryption control. Shall be set to 0 |
| Type | 4 | Type of control |
| Control content | 34 | Content of control |
| HCS | 8 | Header check sequence |

3. Proposed text change

+++++ Start Text +++++
[\[Add the following section 6.3.2.1.3 DL MAC Header without payload\]](#)

[6.3.2.1.3 DL MAC Header without payload \(DL MAC control header\)](#)

[This DL MAC header without payload \(control MAC header\) is sent on DL only. The DL MAC control header](#)

is used for MR-BS or RS(s) to send control signaling to its child RS(s). The format of DL control MAC header is shown in Figure XXX.

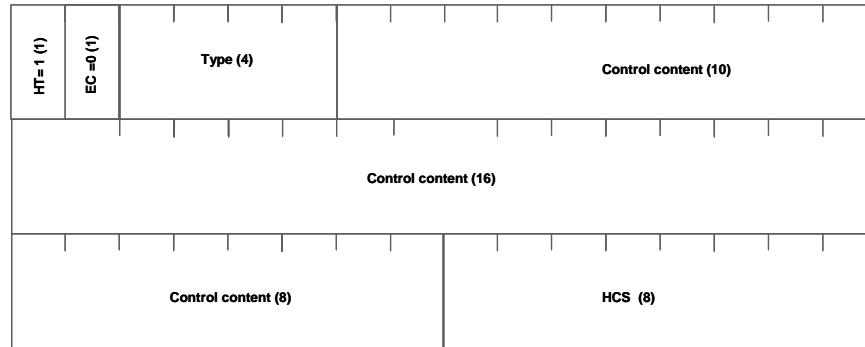


Figure XXX. Format of DL MAC control header.

The DL MAC control header field encoding is show in Table xxx.

Table xxx. DL MAC control header field encoding.

| <u>Name</u> | <u>Length (bits)</u> | <u>Description</u> |
|------------------------|----------------------|--|
| <u>HT</u> | <u>1</u> | <u>Header type. Should be set to 1</u> |
| <u>EC</u> | <u>1</u> | <u>Encryption control. Shall be set to 0</u> |
| <u>Type</u> | <u>4</u> | <u>Type of control</u> |
| <u>Control content</u> | <u>34</u> | <u>Content of control</u> |
| <u>HCS</u> | <u>8</u> | <u>Header check sequence</u> |

+++++ End text +++++