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| Project                      | <b>IEEE 802.16 Broadband Wireless Access Working Group &lt;<a href="http://ieee802.org/16">http://ieee802.org/16</a>&gt;</b>  |  |  |
| Title                        | A method for MSS to determine service flows that may generate paging  |  |  |
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| Re:                          | P802.16e/D3   |  |  |
| Abstract                     | A method for MSS to determine service flows that may generate paging  |  |  |
| Purpose                      | Adoption of proposed changes into P802.16e/D3   |  |  |
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# A Method for MSS to determine packets to be paged

*Moo Ryong Jeong, Toshiro Kawahara*

## Motivation

Current standard does not provide a way for an MSS to determine which Service Flow may generate paging. This may be a problem because of the following reasons:

- It would be a waste of power and resource if an MSS is paged due to the packets in which it is not interested.
- It would be a loss of meaningful packets if an MSS is not paged even when it is interested.

One solution to this problem is to allow an MSS to express its paging preference when creating or changing Service Flows. Encoding of the preference may be defined as one of the Service Flow management encodings in 11.13. Associated BS's behavior may be described in 6.3.21.7.

## Specific Text Changes

### 6.3.21.7 BS Broadcast Paging Message

*[Insert the following sentence at the end of first paragraph in 6.3.21.7.]*

For a BS Broadcast Paging message to be transmitted to indicate the presence of DL traffic pending, there shall be at least a packet in the DL traffic whose Paging Preference indicates paging generation.

### 11.13 Service Flow management encodings

*[Insert the following entries to the Table 381.]*

Table 381-Service flow encodings

| Type      | Parameter                      |
|-----------|--------------------------------|
| 29        | Type of Data Delivery Services |
| 30        | SUD Inter-arrival Interval     |
| 31        | Time Base                      |
| <u>32</u> | <u>Paging Preference</u>       |

*[Insert new section.]*

### 11.13.26 Paging Preference

This parameter specifies whether a Service Flow may generate paging.

| Type         | Length | Value   | DSX                           |
|--------------|--------|---|-------------------------------|
| [145/146].32 | 1      | 0: No paging generation<br>1: Paging generation | DSx-REQ<br>DSx-RSP<br>DSx-ACK |