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Re:	P802.16e/D4		
Abstract	A method for MSS to determine service flows that may generate traffic indication		
Purpose	Proposed resolution for Comment # 647 in Letter Ballot # 14c		
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A Method for MSS to Determine Service Flows That May Generate Traffic Indication

Moo Ryong Jeong, Toshiro Kawahara

Motivation

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

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

6.3.14.4.1 Global Service Flows

[Change the third paragraph as follows.]

Global Service Class Name—A rules based, composite name parsed in <u>eight</u>, one-byte parts of format ISBRLSP<u>T</u>, elements reference extensible look-up tables. Byte placeholders must be expressed values; may not be omitted.

[Insert the following entries to the Table 122a.]

Table 122a-Global Service Flow Class Name Parameters				
n	Name	Size	Value	

Position	Name	Size	Value
<u>T</u>	Traffic Indication Preference	<u>1 byte</u>	<u>0 or 1; 0=No traffic indication; 1=Traffic indication</u>

6.3.2.3.46 Traffic Indication message (MOB-TRF-IND)

[Insert the following sentence at the end of first paragraph in 6.3.2.3.46.]

For a Traffic Indication message to indicate traffic addressed to an MSS, there shall be at least a packet in the traffic whose Traffic Indication Preference indicates traffic indication.

6.3.19 Sleep-mode for mobility-supporting MSS

6.3.19.1 Introduction

[Change the first sentence of the fourth paragraph in 6.3.19.1 as follows.]

2004-08-25

An MSS shall awaken, enter into an interleaved listening-window according to the sleep-interval, check whether there were PDUs addressed for it and with Traffic Indication preference of traffic indication, and check whether there will be Periodic Ranging opportunity within the next sleep interval.

[Change the fifth sentence of the fourth paragraph in 6.3.19.1 as follows.]

The BS may buffer (or it may drop) incoming PDUs addressed to the sleeping MSS and shall send notification to the MSS in its listening-window about whether data <u>with Traffic Indication Preference of traffic indication</u> has been addressed for it during <u>the</u> preceding interval.

6.3.19.3 Traffic indication signaling

[Change the first sentence of the first paragraph in 6.3.19.3 as follows.]

A BS shall notify each MSS in sleep-mode, during its listening-interval, if traffic <u>with Traffic Indication</u> <u>Preference of traffic indication</u> has been addressed to the MSS during any sleep-window iteration.

11.13 Service Flow management encodings

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

Туре	Parameter
29	Minimum Tolerable Traffic Rate
30	Type of Data Delivery Services
31	SUD Inter-arrival Interval
32	Time Base
33	Paging Preference
<u>34</u>	Traffic Indication Preference

[Insert new section.]

11.13.27 Traffic Indication Preference

This parameter specifies whether a Service Flow may generate paging.

Туре	Length	Value	DSX
[145/146].34	1	0: No traffic indication	DSx-REQ
		1: Traffic indication	DSx-RSP
			DSx-ACK