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Title	TLV Definitions for Management Signaling Messages [Title of Contribution; e.g., 802.16 Document Submission Template, Rev. 8.3]
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Abstract	Adding TLV definition for Management Signaling Messages [Description of document contents.]
Purpose	[Description of what the author wants 802.16 to do with the information in the document.] This contribution is to add TLV definition for Management Signaling Messages. TLV can be used for SS management purpose.
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TLV Definition for Management Signaling Messages

Intel, Huawei

Introduction

This contribution is to add Information Element(IE) for Management Signaling Messages.

Proposed Text

Add the following definition into 6.3.2.3.64

6.3.2.3.64 Management Signalling Messages

The following messages may be used to query and set the information elements (IE) on the SS by the BS.

6.3.2.3.64.1 Query IE Request message (ORY_IE_REQ)

[Add the following subclauses:]

The ORY_IE_REQ shall include the following TLVs.

Global parameters (see 11. x.x)

Request to query MS's global parameters as defined in subclause 10.1.

6.3.2.3.64.2 Query IE Response message (ORY_IE_RSP)

[Add the following subclauses:]

The ORY_IE_RSP shall include the following TLVs.

Global parameters (see 11. x.x)

Returns MS's global parameters as defined in subclause 10.1.

6.3.2.3.64.3 Set IE Request message (SET_IE_REQ)

[Add the following subclauses:]

The SET_IE_REQ may include the following TLVs.

Global parameters (see 11. x.x)

Request to set MS's global parameters as defined in subclause 10.1.

6.3.2.3.64.4 Set IE Response message (SET_IE_RSP)

[Add the following subclauses:]

The SET_IE_RSP may include the following TLVs.

Global parameters (see 11. x.x)

MS acknowledges the setting of MS's global parameters.

6.3.2.3.64.5 Notify IE Request message (NTF_IE_REQ)

[Add the following subclauses:]

The NTF_IE_REQ may include the following TLVs.

Global parameters (see 11. x.x)

MS notifies the change of MS's global parameters.

11.23 Management Signaling TLVs

11.23.6 Global parameter TLVs

<u>Information Element(IE) Name</u>	<u>Type</u>	<u>Length</u>	<u>Description</u>	<u>Scope</u>
<u>Lost DL Map Interval</u>	1	2	<u>Time since last received DL-MAP message before downlink synchronization is considered lost in ms.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>LostULMapInterval</u>	2	2	<u>Time since last received UL-MAP message before uplink synchronization is considered lost in ms.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>ContentionRangRetries</u>	3	2	<u>Number of retries on contention Ranging Requests.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>RequestRetries</u>	4	2	<u>Number of retries on bandwidth allocation requests.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>RegRequestRetries</u>	5	2	<u>Number of retries on registration requests.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>TftpBackoffStart</u>	6	2	<u>Initial value for TFTP backoff in second.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>TftpBackoffEnd</u>	7	2	<u>Last value for TFTP backoff in second.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>TftpRequestRetries</u>	8	2	<u>Number of retries on TFTP request.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>TftpDownloadRetries</u>	9	2	<u>Number of retries on entire TFTP downloads.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>SsTftpWait</u>	10	2	<u>The duration between two consecutive Transfer operational parameters (TFTP) retries in min.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>SsRssiLowThreshold</u>	11	4	<u>Low RSSI threshold for generating the RSSI alarm trap.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>
<u>SsRssiHighThreshold</u>	12	4	<u>High RSSI threshold for generating a trap to indicate the RSSI is restored.</u>	<u>QRY_IE_REQ</u> <u>QRY_IE_RSP</u> <u>SET_IE_REQ</u> <u>SET_IE_RSP</u>

<u>SsRssiStatus</u>	<u>13</u>	<u>2</u>	<u>A RSSI notification is generated if the RSSI is lower than wmanIfSsRssiLowThreshold, or above wmanIfSsRssiHighThreshold after alarm is restored.</u>	<u>NTF_IE_REQ</u>
<u>SsRssiStatusInfo</u>	<u>14</u>	<u>255</u>	<u>This object provides additional information about RSSI alarm. It is implementation specific.</u>	<u>NTF_IE_REQ</u>