Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	SA-TEK Update TLV definition
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Re:	IEEE P802.16e/D8
Abstract	In session 35, SA-TEK update TLV was accepted but not inserted
Purpose	Insert SA-TEK Update TLV to the standard as accepted in session #35
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SA-TEK Update TLV definition
Avishay Shraga

1.   Motivation

SA-TEK update TLV is used in SA-TEK-Response message.
It was defined and accepted in session #35 but was not inserted, it must be defined in the standard to use SA-TEK Response message.

2.   Proposed solution

Insert SA-TEK update TLV to the standard
Remove SA-TEK UPDATE message with has no meening.

3.   Changes summary

Insert a new section to section 11.9
11.9.X SA_TEK_Update
This field provides a translation table that allows an MSS to update its security associations and TEK pairs so that it may continue security service after a hand-over to a new serving BS.

Name		Length (1 byte)	Value
SA_TEK_Update		Variable	Compound

The following TLV values may appear in each SA_TEK_Update TLV, dependent on the situation it is used

Name	Type	Length (1 byte)	Value
SA_TEK_Update Type	??	1	1 : TEK parameters for a SA 2 : GTEK parametes for a GSA 3 to 255: Reserved, Not used
New SAID	12	2	New SAID after hand-over to new BS
Old SAID	12	2	Old SAID before hand-over from old BS. In case of initial network entry, old SAID is same as new SAID

Old TEK Parameters	1 3	variable	"Older" generation of key parameters relevant to SAID. The Compound field contains the sub-attributes as defined in Table 370.
New TEK/GTEK –Parameters	1 3	variable	"Newer" generation of key parameters relevant to (G)SAID. The Compound field contains the sub-attributes as defined in Table 370.
GKEK Parameters	1 3	Variable	GKEK and its lifetime for the corresponding GTEK pair if this TLV is for a GSA

Remove section 6.3.2.3.9.20 SA-TEK UPDATE