Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**	
Title	**SAID Update**	
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Re:	802.16 corrigendum 2	
Abstract	TLV 142 needs to be changed to be consistent with previous accepted changes for Cor2.	
Purpose	Adopt for Cor2.	
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Inputs on SAID Update Function in Corrigendum-2 D3

Issue:

The 802.16e-2005 standard contains two methods to specify the mapping of SAIDs from an old (serving) BS to a new (target) BS during network reentry. These two methods are:

SAID Update TLV
SA-TEK Update TLV

Both TLVs include pairs {old SAID, new SAID} which give the mapping between the SAID assignments in the old BS before reentry and the new BS after reentry. Without clear rules as to the interpretation of these TLVs when they appear both during a reentry sequence there is ambiguity.

For that reason a comment was raised and accepted on the 2005 standard (comment nr 336) to remove the subfield "Old SAID" from the SA-TEK Update TLV. This makes the SAID Update TLV the only vehicle for mapping SAID values. Furthermore text was added to clarify behaviour in the absence of this TLV in the RNG-RSP message at initiation of reentry (in section 6.3.22.2.8.1.6.6). In that case only the Primary SAID needs to be updated to match the Basic CID assigned by the new BS. All other SAIDs remain the same.

There was also an accepted comment (nr 615) which requested changing the SA-TEK Update TLV into a common TLV (type 142).

Unfortunately the two accepted changes were not merged and the result was that new TLV 142 (section 11.1.10) still contains subfield "Old SAID".

Solution:

Carry out the approved change in the lay-out of SA-TEK Update TLV and apply it to TLV 142 section 11.1.10.

Change unnumbered table in 11.1.10 shown below as indicated below the figure:

Name	Type	Length (byte)	Value
SA-TEK-Update-Type	142.1	1	1: TEK parameters for an SA 2: GTEK parameters for a GSA 3-255: Reserved
New SAID	142.2	2	New SAID after handover to new BS
Old SAID	142.3	2	Old SAID before handover from old BS
Old TEK/GTEK-Parameters	142.4	variable	"Older" generation of key parameters relevant to (G)SAID. The compund fields contains the sub-attributes as defined in Table 372.
New TEK/GTEK-Parameters	142.5	variable	"Newer" generation of key parameters relevant to (G)SAID. The compund fields contains the sub-attributes as defined in Table 372.
GKEK-Parameters	142.6	variable	GKEK, its lifetime, and its sequence number for the corresponding GSAID.

Strike out item 142.3

~~Old SAID~~	~~142.3~~	~~2~~	~~Old SAID before handover from old BS~~

Change the 3rd paragraph of 11.1.10 as indicated:

Text in D3:

Additionally, in case of HO, for each active SA in previous serving BS, corresponding TEK, GTEK, and GKEK parameters are also included. Thus, SA_TEK_Update provides a shorthand moethod for renewing active SAs used by the MS in its previous serving BS. The TLVs specify SAID in the target BS that shall replace active SAID used in the previous serving BS and also "older" TEK-Parameters and "newer" TEK Parameters relevant to the active SAIDs. The update may also include multicast/broadcast Group SAIDs (GSAIDs) and associated GTEK-Parameter pairs.

Change to:

Additionally, in case of HO, for each active SA in previous serving BS, corresponding TEK, GTEK, and GKEK parameters are also included. Thus, SA_TEK_Update provides a shorthand ~~moethod~~ method for renewing
active SAs used by the MS in its previous serving BS. The TLVs specify SAID in the target BS that shall replace active SAID used in the previous serving BS and also "older" TEK-Parameters and "newer" TEK Parameters relevant to the active SAIDs. The update may also include multicast/broadcast Group SAIDs (GSAIDs) and associated GTEK-Parameter pairs. The New SAID field shall refer to SAID assignments by the new BS. The mapping of these new SAIDs to the SAIDs assigned by the previous serving BS is controlled by the SAID Update TLV (11.7.18) and is further controlled by the rules for SAID updating outlined in section 6.3.22.2.8.1.6.6.