**3GPP TSG-SA WG3 Meeting #101e *S3-203006-r4***

**E-meeting, 9-20 November 2020**

**Title: Draft LS to CT6 on clarification of NAS COUNTs storage in USIM**

**Release: R16**

**Work Item: 5G\_Ph1\_Sec**

**Source:** SA3

**To:** CT6

**Cc:**

**Contact Person:**

#### **Name:** Ivy Guo

E-mail Address: ivy\_guo@apple.com

**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**Attachments: S3-20xxxx (security requirement agreed by SA3)**

**1. Overall Description:**

SA3 identified a security issue resulting from storage of NAS COUNTs on USIM as specified in TS 31.102.

When UE has 2 accesses (3GPP access and non-3GPP access) in two different PLMNs simultaneously, SA3 requires that for each PLMN the UE is connected to, both NAS COUNT pairs (one pair for 3GPP access and another pair for non-3GPP access) for each NAS security context shall be stored in the USIM.

This is because even if a UE is currently not connected to one PLMN over non-3GPP access, the NAS COUNTs for that access may be non-zero from a previous use of the security context on that access. NAS COUNTs shall not be reset without rekeying, as otherwise keystream will be reused.

SA3 clarified the security requirement in the attached CR S3-20xxxx.

SA3 kindly request CT6 to update the TS 31.102 and take care about the backward compatibility.

Also, SA3 requires that UE shall store and use the latest GUTI from a PLMN, irrespective of the access type over which the GUTI is sent.

SA3 kindly requests CT6 to check the TS 31.102 to align with the above GUTI storage requirement.

**2. Actions:**

**ACTION**: SA3 kindly asks CT6 to take action on the above request and provide feedback accordingly.

**3. Date of Next TSG-SA WG3 Meetings:**

SA3#101bis-e 12 – 16 January 2020 online

SA3#102-e 22 Feb– 5 March 2020 online