**3GPP TSG-SA3 Meeting #99e *S3-201120***

**e-meeting, 11 – 15 May 2020** Revision of S3-20xxxx

**Title:** Draft LS reply to CT4 LS on Multiple Kausf upon registering via multiple SNs

**Response to:** LS on Multiple Kausf upon registering via multiple SNs

**Release:** Rel-16

**Work Item:**

**Source:** SA3

**To:** CT4

**Cc:**

**Contact Person:**

#### Name: Juan Deng

**Tel. Number:**

E-mail Address: dengjuan5@huawei.com

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

**Attachments:**

**1. Overall Description:**

SA3 thanks CT4 for the LS (S2-202348) on Multiple Kausf upon registering via multiple SNs.

The following questions were proposed by CT4..

1. When two different AUSFs are selected by the two serving PLMNs, how does UDM handle the SoRProtection or UPUProtection services – how does UDM select which AUSF to talk to?

2. When same AUSF is selected by the two serving PLMNs, does AUSF only save the latest Kausf?

3. Does UE only store the latest Kausf in multiple registrations?

In general, SA3 prefers to use the Kausf resulted from the latest authentication (regardless of the serving network) for SoRProtection and UPUProtection.

It is SA3’s understanding that

* UDM stores the authEvents for both serving networks in multiple registration. UDM selects the AUSF reporting the most recent successful authentication result.
* To prevent the SoR and UPU failure in the case where the UE having multiple registrations de-registers from the new serving network,
  + AUSF and UE stores the newest Kausf after UE deregistration;
  + UDM, when deleting the authentication results for the new serving network, keeps the AUSF info in the authEvent.

SA3 would like to ask CT4 to evaluate if there are the backward compatibility issues caused by the above the understanding, and inform SA3 if any.

SA3 would like CT4 to clarify the following question:

When does a newly generated Kausf replace the old Kausf in the UE?.

**2. Actions:**

**To CT4 group.**

**ACTION:** SA3 kindly asks CT4 group to take the above information into account and inform SA3 on the identified backward capability issue and the clarification on UE’s use of the new Kausf .

**3. Date of Next TSG-SA WG5 Meetings:**

SA3#100bis 17 – 21 August 2020 US, US

SA3#101 09 – 13 November 2020 India, IN