3GPP TSG SA WG 3 Meeting #104-e TDoc S3-21xxxx-r3

e-meeting, 16 - 27 August 2021

**Title: LS on NSAC procedure**

**Response to:**

**Release: Release 17**

**Work Item: Study on enhanced security for network slicing Phase 2 (FS\_eNS2\_SEC)**

**Source: SA3**

**To: SA2**

**Cc:**

**Contact person: Zander Lei**

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

**Attachments:**

# 1 Overall description

SA3 is investigating potential security issues with respect to the NSAC procedures specified in TS 23.501 and TS 23.502. SA3 would like to seek feedback from SA2 for the following issues, with more descriptions in TR 33.874 (KI#xx):

* Once UE is registered to a slice, it is always counted in NSACF quota even if the UE is never using the slice. This may cause slice underutilized especially when many legitimate/malicious UEs each registers to many slices
  + One potential solution is to consider UE usage of a slice, e.g. whether there is any PDU session established. Is it feasible?
* SA3 has identified some unclear aspects when the NSAC, NSSAA and EAC procedures interact with each other. SA3 would appreciate if these aspects are clarified:
  + Assuming NSSAA is executed before NSAC, then if NSSAA is successful but NSACF quota has been reached, UE will be rejected, is this assumption correct? When UE registers again, does NSSAA need to be performed again?
  + A burst in the number of UEs attempting to register under EAC mode inactive may cause slice overloading and DoS. Is there an issue with the EAC procedure upon a burst of UE registrations?

# 2 Actions

**To SA2**

**ACTION:** SA3 kindly requests SA2 to take the above information into account and provide feedback on the three concerned issues.

# 3 Dates of next TSG SA WG 3 meetings

SA3#105e 8 - 12 November 2021 e-meeting