**3GPP TSG-SA3 Meeting #104-e *S3-212463-r2***

e-meeting, 16 - 27 August 2021 was *S3-211527-r3*

**Title: Reply LS to GSMA on prevention of attacks on sliced core network**

**Response to: LS S3-212420 from GSMA FSAG**

**Release: N/A**

**Work Item: N/A**

**Source:** **SA3#104-e**

**To: GSMA**

**Contact person: Tao Wan**

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

**Attachments:** none

# 1 Overall description

# SA3 thanks GSMA FSAG for their LS on "Prevention of attacks on sliced core network". SA3 would like to provide the following clarifications on the attacks discussed in the GSMA LS.

First, we would like to suggest that the assumption of these attacks appears strong that an NF could be compromised. We next provide clarification on each of the three attacks:

**Theft of Access Token** – this attack could be mitigated if the NRF authorizes the NF service consumer to obtain tokens only for authorized slice(s). SA3 is investigating whether additional enhancement to authorization procedure is necessary to mitigate the threat.

**OCI mis-usage** – this attack as described in GSMA LS is not realistic since 3gpp-Sbi-Oci is used by a recipient NF to mark the overload of the sending NF who created the header. In the described attack, the attacking NF would be marked by the shared network function as overload. Further, oOCI scope is on the level of NF instance or NF set, not on the slice level. Even if the S-NSSAI is in the header, it indicates that NF instance or NF set serving the particular slice is overloaded, not implying that the entire slice is overloaded.

**User Location Information Acquisition** – this attack could be mitigated if the shared network function (NF service producer) checks the SUPI in a service request and the requesting NF service consumer are being served by a common slice. SA3 is investigating if 3GPP specifications allow for such check.

# 2 Actions

**To: GSMA FSAG**

**ACTION:** SA3 ask GSMA please take the above information into account.

# 3 Dates of next TSG SA WG 3 meetings

The next TSG SA WG3 meetings are available here:

https://www.3gpp.org/DynaReport/Meetings-S3.htm