**3GPP TSG-SA3 Meeting #107-e *draft\_S3-220952-r4***

e-meeting, 16 - 20 May 2022

**Title: [draft] LS on PLMN ID used in Roaming Scenarios**

**Release: Rel-17**

**Source: Ericsson, to be SA3**

**To: CT4, SA2**

**Cc:**

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

**Attachments:** **S3-221213**

# 1 Overall description

Initiated by an LS from GSMA, the approved draftCR S3-221213 attempts to enhance the security requirements in TS 33.501, clause 5.9.3.2 "Requirements for Security Edge Protection Proxy (SEPP)".

The context is related to the case of one operator having support for multiple PLMN-IDs. In roaming scenarios where one SEPP serves a given PLMN, and such PLMN has multiple PLMN-IDs, and uses the same N32 connection for all PLMN-IDs, the editor's notes from S3-221213 still need to be addressed:

"Editor's Note: It is FFS what should be the asserted PLMN-ID if the NF has not included the PLMN-ID header and the SEPP serves multiple PLMN-IDs."

"Editor's Note: It is FFS which PLMN ID an NF will include in case the NF serves multiple PLMN IDs."

SA3 made the following observations:

**Observation 1**

The NFc certificate contains just one PLMN-ID in the Subject DN.

**Observation 2**

When performing an analysis of the NFc to SEPP communication we have concluded that the PLMN-ID Information Element not always is provided in the NFc message payload.

**Observation 3**

Even if default PLMN-ID information is available, it cannot always be trusted by the NFp. This has been a design assumption in SA3 in the past.

**Observation 4**

TS 33.501, clause 6.1.4.1 describes "Linking increased home control to subsequent procedures". The actions taken by the home network to link authentication confirmation (or the lack thereof) to subsequent procedures are subject to operator policy and are not standardized. Depending on operator policy, increased home control may lead to the UE registration request to be rejected by the home PLMN if the PLMN-ID header carries a different PLMN-ID than the earlier authentication request.

**Observation 5**

Indirect communication models may impact the identification of the PLMN-ID of the sending NF by the sending SEPP.

**Observation 6 (specifically to SA2)**

CT4 has already specified the 3gpp-Sbi-Asserted-Plmn-Id header in TS 29.500, clause 5.2.3.2.15.

Taking these observations into account, SA3 would like to encourage a technical resolution of the two editor's notes.

# 2 Actions

**To CT4 and SA2**

**ACTION:** SA3 asks CT4 and SA2 to kindly provide a technical solution to the two editor's notes, with the conditions described in the "Overall description".

# 3 Dates of next TSG SA WG 3 meetings

SA3#107e-Bis 27 June - 1 July 2022 electronic meeting

SA3#108e 22 -26 August 2022 electronic meeting