**3GPP TSG-SA3 Meeting #107-e *draft\_S3-220952-r1***

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:** **S3-220479**

# 1 Overall description

Initiated by an LS from GSMA, [S3-220479](https://www.3gpp.org/ftp/tsg_sa/WG3_Security/TSGS3_106e/Docs/S3-220479.zip) 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 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. [S3-220479](https://www.3gpp.org/ftp/tsg_sa/WG3_Security/TSGS3_106e/Docs/S3-220479.zip) provides the following editor notes:

"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 Observation 1**

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

**SA3 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.

**SA3 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.

**SA3 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.

# 2 Actions

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

**ACTION to SA2:** SA3 asks SA2 to kindly analyse whether normative changes to specifications under SA2's remit are necessary to provide a technical solution to the two Editor's Notes. SA3 also kindly asks SA2 whether SA2 has further input on the issues described in the two Editor's Notes.

# 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 Goteborg, Sweden