**3GPP TSG-SA3 Meeting #105-e *draft-S3-213806-r2***

e-meeting, 8 - 19 November 2021

**Title: draft-Reply LS on 5GS roaming hubbing**

**Response to: LS S3-213806 on 5GS roaming hubbing**

**Source: NTT DOCOMO (to be SA3)**

**To: GSMA 5GJA**

**Cc: CT4**

**Contact person: Alf Zugenmaier / NTT DOCOMO**

 **zugenmai@hm.edu**

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

# 1 Overall description

SA3 would like to thank 5GJA for their LS on 5GS roaming hubbing (S3-213806). SA3 understands that roaming hubs are an important part of the mobile ecosystem.

Regarding the LS, SA3 would like to make the following observations:

1. The deployment in Figure 1 of 5GJA's LS is not supported by 3GPP specifications, as there is no concept of SEPP chaining, i.e., having a RH SEPP on the path between pSEPP and cSEPP.
If there is a requirement that the RH SEPP control the setup of N32-c between the PLMN SEPPs, the roaming hub may use a proxy allowing or disallowing the HTTP "connect" method, or use of a reverse proxy with SNI TLS-pass through. The roaming hub would take the role of "IPX" for N32-f, and, by using PRINS, can be in control of N32, being able to audit all requests and responses going across the connection marked as "B".
SA3 would like to ask 5GJA to clarify whether the N32 interface would go between the PLMN SEPPs via the RH SEPP, or between the PLMN SEPP and the RH SEPP.
2. It is mentioned in the LS that "The PLMN 1 SEPP in Figure 1 handles both bilateral N32 connection (A) and the Roaming Hub relation (B)", SA3 would like to request GSMA to clarify if (A) and (B) are N32-c connections.
3. It is unclear why 5GJA assumes that a roaming hub would have full visibility of all agreements, as the routing of these N32 connections would be configured to go via the proxy in the roaming hub only for agreements involving the roaming hub. SA3 would like to request GSMA to clarify the meaning of commercial agreement between network operator and roaming hub, including visibility and liability.
4. There is essentially no technical difference between roaming hub and operator group roaming hub. The grouping is described and depicted as pure organizational aspect of a roaming hub scenario with trust relation impacts. As such, but trust wise, the strong trust relationship among the Network Operator Group member may provide an opportunity to simplify the certificate and CA management by having one operator group roaming hub CA as a common interconnection CA for all the roaming partners within the Network Operator Group.
5. 5GJA mentions that "regulation in some countries may require that the PLMN SEPP be deployed in the PLMN and located in the country where the PLMN operates". SA3 would like to ask 5GJA to clarify whether RH SEPPs are included in or exempted from these requirements.
6. SA3 also kindly requests GSMA to clarify whether having one TLS connection for all roaming partners' traffic is required.
7. In the case of operator group roaming hub, it is unclear why visibility of direct roaming relations would be undesirable if the purpose is for the group to centrally scrutinize the traffic.
3GPP doesn't require that only one SEPP is used inside a PLMN. During discovery, the NRF can steer a cNF towards the correct SEPP.

Furthermore, SA3 would like to point out that 3GPP defined the PRINS protocol to fulfil the requirements requested by GSMA during specification of 5G. SA3 would like to request GSMA to clarify whether GSMA has updated the original requirements, and if yes to clearly specify the updates compared to the original requirements.

# 2 Actions

**To 5GJA**

**ACTION:** SA3 would like to ask 5GJA to take the above into consideration,provide requirements that come from the use case of roaming hubbing, and answer the questions above

# 3 Dates of next TSG SA WG 3 meetings

SA3#106 7-11 February 2022 e-meeting

SA3#106-Bis 4 - 8 April 2022 TBD