**3GPP TSG-SA5 Rapporteur call *S5-22xxxx***

**e-meeting, 16 March 2022**

**Source: Ericsson AB**

**Title: CHF selection when interaction with two CHFs**

**Document for: Discussion**

**Agenda Item: Roaming**

# 1 Decision/action requested

**Agree on the way forward for the CHF selection related to roaming with local breakout.**

# 2 References

[1] [1] 3GPP TS 32.255: "Telecommunication management; Charging management; 5G data connectivity domain charging; stage 2"

# 3 Rationale

For the roaming local breakout scenario, the visited network V-SMF needs to select two CHF one in the VPLMN and one in the HPLMN. Using PCF or UDM based would not be applicable since that would require interaction with the HPLMNs PCF and UDM, that leaves the NRF and local configuration.

See proposed changes to TS 32.255 [1] in clause 4.

# 4 Detailed proposal

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| **First change** |

#### 5.1.9.2 CHF selection

In roaming home routed and local breakout scenario, at PDU session establishment, the CHF selection mechanism specified in clause 5.1.8 applies to:

- The V-SMF for V-CHF and H-CHF selection, with the following differences:

- CHF address(es) selection mechanisms based on PCF and UDM are not applicable.

- when charging characteristics is used it will be based on local configuration.

- when NRF is used, the V-CHF can be selected based on UE identified as in-bound roamer and the PLMN Id of the H-PLMN;

- The H-SMF for H-CHF selection, with the following difference:

- when NRF is used, the H-CHF can be selected based on UE identified as out-bound roamer and the PLMN Id of the V-PLMN.

In roaming home routed scenario, at PDU session V-SMF change:

- intra-PLMN: CHF address supplied by the old V-SMF shall be used.

- inter-PLMN: CHF selection mechanism as per V-SMF CHF selection in VPLMN at PDU session establishment shall be used.

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| **End of changes** |