**3GPP TSG-SA5 Meeting #143-e *S5-223118***

e-meeting, 9 - 17 May 2022

**Source: Ericsson**

**Title: Adding SMF to multiple CHF solution to clause 7.5**

**Document for: Approval**

**Agenda Item: 7.5.3**

# 1 Decision/action requested

**Include the proposed changes in TR 28.827.**

# 2 References

[1] 3GPP TR 28.827: "Study on 5G charging for additional roaming scenarios and actors"

# 3 Rationale

Adding a solution to convey charging from visited MNO to home MNO, and home MNO to an additional actor with SMF to multiple CHF communication.

# 4 Detailed proposal

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| **First change** |

#### 7.5.4.x Solution #5.x: SMF to multiple CHF communication

##### 7.5.4.x.1 General

A possible solution for key issue #5a, #5b, and #5c, charging for 5G data connectivity provided to the additional actor by the visited MNO through the home MNO.

##### 7.5.4.x.2 Reference architecture



Figure 7.5.4.x.2-1: Additional actor with only CHF 5G data connectivity roaming scenario in service-based interface representation



Figure 7.5.4.x.2-2: Additional actor with only CHF 5G data connectivity roaming scenario in reference point representation

The visited and home MNO CHF does converged charging for interconnect, home MNO CHF does converged charging for wholesale, and the additional actor CHF does converged charging for the subscriber.

##### 7.5.4.x.3 Message flows

This would be a combination of the flows in clauses 7.2.4.2 and 7.4.4.1.

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| **End of changes** |