**3GPP TSG-SA5 Meeting #143-e *S5-223341***

**e-meeting, 9-17 May 2022**

**Source: China Mobile**

**Title: Add use case2 for PDU Session management of FS\_5GLAN\_Mgt**

**Document for: Approval**

**Agenda Item: 6.5.11**

# Decision/action requested

***The group is asked to discuss and endorse the proposal in section 4***

# 2 References

[1] SP-220324 " New Study on Management Aspects of 5GLAN "

[2] 3GPP TS 23.501: "System Architecture for the 5G System; Stage 2".

# 3 Rationale

This contribution proposes to add usecase for TR 28.833.

# 4 Detailed proposal

It proposes to make the following changes.

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| **1st Change** |

4.3 5G VN group management

5G System supports management of 5G VN Group identification and membership (i.e. definition of 5G VN group identifiers and membership) and 5G VN Group data (i.e. definition of 5G VN group data). The 5G VN Group management can be configured by a network administrator or can be managed dynamically by AF.

A 5G VN group is characterized by the following:

- 5G VN group identities: External Group ID and Internal Group ID are used to identify the 5G VN group.

- 5G VN group membership: The 5G VN group members are uniquely identified by GPSI. The group as described in clause 5.2.3.3.1 of TS 23.502 [4] is applicable to 5G LAN-type services.

- 5G VN group data. The 5G VN group data may include the following parameters: PDU session type, DNN, S-NSSAI and Application descriptor, Information related with secondary authentication / authorization (e.g. to enable IP address assignment by the DN-AAA).

The Information related with secondary authentication / authorization corresponds to the procedures described in clause 5.6.6; it allows e.g. the AF to provide DN-AAA server addressing information and possibly to request the SMF to get the UE IP address from the DN-AAA server.

In order to support dynamic management of 5G VN Group identification and membership, the NEF exposes a set of services to manage (e.g. add/delete/modify) 5G VN groups and 5G VN members. The NEF also exposes services to dynamically manage 5G VN group data.

# 5 Use cases and potential requirements

## 5.X Use case X: PDU Session management

### 5.X.1 Description

The session management is applicable to 5G LAN-type services with clarification and enhancement. For example, SMF may support PDU Sessions for a 5G VN group, which offers a virtual data network capable of supporting 5G LAN-type service over the 5G system. The whole PDU sessions belong to the 5G VN group need to select the same SMF based on network configuration. But how to configure to select the same SMF based on network configuration has not defined yet. The 3GPP management system should have the capability to manage the PDU Session for providing 5G LAN-type services, including:

- A UE gets access to 5G LAN-type services via a PDU Session of IP PDU Session type or Ethernet PDU Session type.

- A PDU Session provides access to one and only one 5G VN group.

- A dedicated SMF is responsible for all the PDU Sessions for communication of a certain 5G VN group.

- A PDU Session provides unicast, broadcast and multicast communication for the DNN and S-NSSAI associated to a 5G VN group.

### 5.X.2 Potential requirements

**REQ-LAN-PDU-01** The 3GPP management system should have the capability to manage the PDU Session for providing 5G LAN-type services.

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| **End of Change** |