**3GPP TSG-SA5 Meeting #143-e *S5-223340***

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

**Source: China Mobile**

**Title: Add use case1 for 5G VN group data 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] 3GPP TS 22.261: "Service requirements for next generation new services and markets; Stage 1".

# 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.

The support of 5G VN group management configured by a network administrator (OAM-based 5G VN group management) is described in clause 5.25.2 of TS 23.501 [6].

# 5 Use cases and potential requirements

## 5. X Use case X: 5G VN group data management

### 5.X.1 Description

5G LAN-type services are provided for the customers who request services with similar functionalities to Local Area Networks (LANs) and VPN’s but improved with 5G capabilities (e.g. high performance, long distance access, mobility and security). To support 5G LAN-type services, 3GPP management system may need to support the management of 5G VN group (e.g. configuration of service area where 5G VN group communication is applicable to the UEs).

As defined in TS 23.501 [8], the 5G VN group configuration is either provided by OAM or provided by an AF to the NEF. It means the 5G VN group parameters about a UE may be configured in subscription data of the UE and delivered together with other subscription data by the UDM for supporting 5G LAN service. For the configuration for 5G VN group data management, the 3GPP management system can support the 5G VN group data management, including:

* The configuration for 5G VN group data creation based on External Group ID.
* The configuration for 5G VN group data modification based on External Group ID.
* The configuration for 5G VN group data deletion based on External Group ID.

### 5.X.2 Potential requirements

**REQ-LAN-GDM-01** The 3GPP management system should have the capability to manage the 5G VN group data creation.

**REQ-LAN-GDM-02** The 3GPP management system should have the capability to manage the 5G VN group data modification.

**REQ-LAN-GDM-03** The 3GPP management system should have the capability to manage the 5G VN group data deletion.

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| **End of Change** |