**3GPP TSG-WG SA WG2 Meeting #162 S2-2404910r1**

**Changsha, China, 15th –19th April, 2024 (revision of** **S2-2402735)**

**Source: CATT, ETRI**

**Title:** **New solution for KI#1.1 for Subscription aspects to support DualSteer**

**Document for: Approval**

**Agenda Item: 19.13**

**Work Item / Release: FS\_MASSS / Rel-19**

*Abstract of the contribution:* *This paper proposes a new solution for* *FS\_MASSS KI#1.1.*

# 1 Discussion

This paper proposes a new solution for KI#1.1: Subscription aspects to support DualSteer.

# 2 Proposal

It is proposed to include the following changes in TR 23.700-54 V0.2.0.

 **\* \* \* \* Start of Changes \* \* \* \***

# 6 Solutions

## 6.0 Mapping of Solutions to Key Issues

Table 6.0-1: Mapping of DualSteer Solutions to Key Issues

|  |  |
| --- | --- |
|  | Key Issues for DualSteer |
| Solution# | Key Issue #1.1 | Key Issue #1.2 | Key Issue #1.3 | Key Issue #1.4 |
| #X | X |  |  |  |
|  |  |  |  |  |

**\* \* \* \* Next Changes(all new next) \* \* \* \***

### 6.1.X Solution #X: The UE subscription data for DualSteer in the UDM/UDR

#### 6.1.X.1 Description

This solution addresses the Key Issue #1.1: Subscription aspects to support DualSteer.

This solution shows how the UDM/UDR identifies and associates the two subscriptions/SUPIs for the DualSteer Device in the UE subscription data.

This solution is based on the following assumptions:

- The DualSteer Device has two UEs which identified by SUPI1 and SUPI2 separately.

The following table 6.1.X.1-1shows the example of new added “DualSteer Subscription data” in the UDM/UDR for the DualSteer Device.

Table 6.1.X.1-1 Example of DualSteer Subscription data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DualSteer Subscription data | List of SUPIs | DualSteer Authorization | Associated SUPI/IMSI |  |  | Access type/RAT restriction |
| SUPI 1 | True | SUPI 2 |  |  |  |
| SUPI 2 | True | SUPI 1 |  |  |  |

The above parameters in the table 6.1.x.1-1are described as follows:

- List of SUPIs: list of Identifiers for the UE which can be identified by SUPI/IMSI.

- DualSteer Authorization: Indicate whether the UE is authorized to use the DualSteer service.

- Associated SUPI/IMSI: Indicate the associated UE identifier sharing a DualSteer device, which can be identified by SUPI/IMSI.

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- Access Type/RAT restriction: Indicate which Access Type/RAT cannot be accessed by the DualSteer Device.

After provisioning the DualSteer Subscription data in the UE subscription data, the UDM in the 5GS can identify and associate the two subscriptions/SUPIs for the DualSteer Device if it has two single UEs.

#### 6.1.X.2 Procedures

The procedure of AMF/SMF retrieving the UE subscription data from the UDM as defined in clause 4.2.2.2 and clause of 4.3.2.2 of TS 23.502[4] can be reused.

#### 6.1.X.3 Impacts on services, entities and interfaces

The solution impacts the following network functions:

**UDM/UDR:**

- Provision DualSteer Subscription data to identify and associate the two subscriptions/SUPIs for DualSteer Device.

**UE:**

- The USIM profile should also be configured to align with the DualSteer Subscription data in the UDM/UDR.

**\* \* \* \* End of Changes \* \* \* \***