**3GPP TSG- SA1 Meeting # 104 S1-23xxxx**

**Chicago, USA, 13 - 17 November 2023** *(revision of S1-23xxxx)*

**Source: Huawei, Mediatek**

**pCR Title: Pseudo-CR on FS\_DualSteer Definitions and Consolidated Potential Requirements**

**Draft Spec: 3GPP TR 22.841**

**Agenda item: 7.9.1**

**Document for: Approval**

**Contact: xxx**

*Abstract: This document includes a pCR proposal to add new definitions to the TR, and to fill sec.6 on consolidated potential requirements.*

\* \* \* First Change \* \* \* \*

# 6 Consolidated Potential Requirements

## 6.1 Introduction

The following requirements represent a consolidation of the various potential requirements by focusing on the scenarios that two networks with 3GPP access (with both being 5G satellite access networks, or one of them being a 5G TN whilst the other being a 5G satellite access network) are present before the UE is about to move outside of the coverage of the serving network with 3GPP access (i.e. either a 5G TN or a 5G satellite access network), the 5G system provides the functionalities of switching, under network control, all the traffic on the UE from the currently serving network with 3GPP access to the other network while there is only traffic on one of the two access networks, aiming at minimizing the switching time to enhance the user experience. There is no traffic being transmitted onto the to-be-switched-to network with 3GPP access, as long as there is still ongoing traffic being transmitted onto the currently serving network with 3GPP access.

The two networks with 3GPP access are two different PLMNs operated by two operators, with a business agreement needed to be in place between the two network operators (no impact on existing inter-PLMN roaming). The UE's user data is anchored in the HPLMN's core network, supporting single radio capable UE operation.

To meet this new requirement will not result in any negative impact on 5G system in terms of both operation and performance.

## 6.2 General

**Table 6.2-1 – General Consolidated Requirements**

| CPR # | Consolidated Potential Requirement | Original PR # | Comment |
| --- | --- | --- | --- |
| CPR 6.2-1 | Subject to operator policies, the 5G system shall be able to support a mechanism to minimize (for a single-radio capable UE) the network-controlled switching time of all of the UE’s ongoing traffic (i.e. all data originated from and being sent to a UE) from one 3GPP access network belonging to one PLMN to another 3GPP access network belonging to another PLMN, both 3GPP access networks being 5G satellite access networks, or one of them being a 5G TN whilst the other being a 5G satellite access network, belonging to different PLMNs managed by different operators with user data anchored in the HPLMN, based on the access networks coverage. The two PLMNs belong to two different operators, and the user data is anchored in the HPLMN. There shall not be traffic initiated or maintained over one 3GPP access network if there is already ongoing UE traffic over the other 3GPP access network. This assumes a single PLMN subscription. NOTE 1: A business agreement is required to be in place between the two operators.NOTE 2: The fast switch time aims at improved user experience, i.e. minimized interruption of an ongoing service.NOTE 3: To meet this new requirement will not impact existing 5G network, i.e. its operation and provided services will not be negatively impacted. | 5.1.6-0015.4.6-0015.5.6-0015.6.6-0015.6.6-0025.9.6-0015.10.6-0015.14.6-0015.17.6-0015.18.6-0015.19.6-001 |  |

## 6.3 Charging and other aspects

Table 6.3-1 – Charging and other Consolidated Requirements

| CPR # | Consolidated Potential Requirement | Original PR # | Comment |
| --- | --- | --- | --- |
| CPR 6.3-1 | The 5G system shall be able to collect charging information related to network-controlled switching of user's all ongoing traffic (i.e. all data originated from and being sent to a UE) from one 3GPP access network to another 3GPP access network, both being 5G satellite access networks, or one of them being a 5G TN whilst the other being a 5G satellite access network, with user data anchored in the HPLMN.NOTE 1: The two 3GPP access networks belong to two different PLMNs operated by two operators.NOTE 2: Charging information should be collected for both 3GPP access networks, and a business agreement among network operators is required. | 5.5.6-0025.9.6-0025.17.6-002 |  |

\* \* \* End of Change \* \* \* \*