**3GPP TSG-SA WG6 Meeting #64S6-245339**

**Orlando, USA, 18th – 122nd November 2024 (revision of S6-245211)**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Hisilicon | | | | | | | | | |
| ***Source to TSG:*** | S6 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | Generic\_IOPS | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Base on the conclusion in TR 23.700-09, the solution #7 is agreed for the normative work. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update the clause 9 based on solution#7. | | | | | | | | |
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| ***Consequences if not approved:*** | | The IOPS application is not applicable for any access, e.g., 5GS. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.1, 9.2, 9.2.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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9.1 Overview

The IOPS architectural model includes application functions at the IOPS MC system and UEs to support MC services in the IOPS mode of operation during a backhaul failure. The IOPS MC system provides MC services support to the MC service UE via a single PLMN dedicated to the IOPS mode of operation.

The architectural model to support MC services in the IOPS mode of operation consists of a signalling control plane and an application plane. The signalling control plane provides the necessary signalling support for the related IOPS application layer transactions, e.g. the registration and discovery of UEs on the IOPS MC system. The IOPS application plane provides the necessary support for the transport of the IOPS operation related application data as well as the IP packets containing the MC service application data to be distributed via the IOPS MC system.

The MC service application data includes all signalling control data and application data (control and media) required to provide MC services between MC service clients. The IP related transmissions are established over the IOPS MC system via IP unicast and multicast transmissions.

9.2 IOPS architectural model diagram

Figure 9.2-1 shows the IOPS architectural model for the IOPS MC system solution in case of a backhaul failure.



**Figure 9.2-1 Architectural model in the IOPS mode of operation**

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9.2.2 IOPS 3GPP system

A IOPS 3GPP system can comprise either:

- a local core network and a single isolated IOPS-capable base station, which may be co-located or have connectivity to the local core network; or

- a local core network and two or more IOPS-capable base station, which have connectivity to a single local core network.

NOTE: For 4G IOPS, the implementation and deployment guidelines using a Local EPC approach is described in 3GPP TS 23.401 [2].

The IOPS 3GPP system provides point-to-point and/or point-to-multipoint transmission services with QoS in the IOPS mode of operation, e.g., as described in 3GPP TS 23.401 [2] for EPS.