**3GPP TSG-WG SA2 Meeting #152E e-meeting *S2-2206111r06***

**Elbonia, Aug17th – 26th, 2022 (revision of S2-220xxxx)**

**Source: Samsung, Huawei, China Telecom**

**Title: Conclusion for FS\_GMEC KI#5**

**Document for: Approval**

**Agenda Item: 9.2**

**Work Item / Release: FS\_GMEC / Rel-18**

*Abstract: Providing Conclusion for KI#5.*

# 1. Introduction/Discussion

Based on evaluations of solutions for KI#5, it is proposed to update the conclusion for KI#5.

Since sol#6 and sol#17 both assume that the data sent to different groups corresponds to data with different destinations and the UE can determine how to send the data toward a group, their principles or approaches are in line and the scenarios are complementary. Hence, it is proposed to adopt sol#6 and sol#17 when the application on the UE can replicate multiple copies of the data.

Since sol#7 is the only solution to address the case where UE application is not capable to replicate multiple copies of the data, so sol#7 is used for such case.

# 2. Text Proposal

It is proposed to capture the following changes to TR 23.700-74.

\* \* \* \* First change \* \* \* \*

## 8.5 Key Issue #5: Allowing UE to simultaneously send data to different groups with different QoS policy

In case when UE/Application is capable to replicate multiple copies of the data, the following are way forwards.

- If different groups (IP/Ethernet multicast groups) are associated to the same DNN and S-NSSAI combination used for 5G VN group, then different QoS Flows of single PDU Session may be used to transfer the data copy sent to different groups

- If different groups (IP/Ethernet multicast groups) are associated to the different DNN and S-NSSAI combinations used for 5G VN group, then different PDU Sessions may be used to transfer the data copy sent to different groups

In case when UE/Application is not capable to replicate multiple copies of the data, the following are way forwards.

-   UE establishes a PDU Session to a DNN/S-NSSAI, as per R17 specifications. This can be a special DNN/S-NSSAI configured by the operator for e.g. an electrical system.

- Each group and group combination is associated with a separate multicast address

-  UE sends traffic to a multicast address depending on what group(s) it wants to target. This allows a UE to send a single packet reaching multiple destinations and also multiple groups.

-  Each UE has a QoS policy where a multicast address is associated with a QoS level. The QoS level is set according to the QoS requirements for the group(s) the multicast address represents. Corresponding QoS Flow(s) is activated on each UE’s PDU Session, as needed.

-    UE sends one UL copy to the multicast address representing the destination group(s), and with the corresponding QoS. Multicast packet forwarding takes place as per existing functionality.

\* \* \* \* End of changes \* \* \* \*