**3GPP TSG-SA WG4 Meeting #131-bis-eS4-250574**

**Online, 11 – 17 April 2025**

Title: Draft LS to SA2 and RAN2 on RTP retransmission

Response to: -

Release: Rel-19

Work Item: 5G\_RTP\_Ph2

Source: SA4

To: SA2, RAN2

Cc: -

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**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

Attachments: none

**1. Overall Description::**

During the FS\_5G\_RTP\_Ph2 study, SA4 looked into a candidate solution that aims to enable network awareness for RTP retransmission (as specified in RFC 4588) with the goal of improved PDU Set handling in the 5GC, as documented in clause 6.9 of TR 26.822.

According to RFC 4588, source and retransmitted PDUs associated to a media flow are transmitted in separate RTP streams. Hence, they may be mapped by the 5GC into the same or different QoS flows.

SA4 believes that it is preferable that RTP senders apply PDU Set marking only to PDUs sent in source streams and that the network transmits source and retransmission streams in the same QoS flow. SA4 understands that this would lead to a retransmitted PDU being marked by the 5GC into a new PDU Set that contains a single PDU since it is an N6-unmarked PDU.

Question to SA2 and RAN2: SA4 would like to ask if there are any benefits to provide application-layer retransmission information to the 5GC and/or RAN when PDU Set based handling is enabled. If that is the case, SA4 would like to receive feedback on what information on application-layer retransmissions would be beneficial for PDU Set based handling in the 5GC and/or RAN.

Currently, the RTC architecture defined in TS 26.506 has no mechanism to indicate to the 5G network whether an application uses retransmission for any of its RTP streams, neither any other information related to RTP retransmission (e.g. flagging retransmitted PDUs in the RTP HE for PDU Set marking, indicating how long source packets are kept in the sender buffer for potential retransmission).

**2. Actions:**

**To SA2, RAN2**

**ACTION:** SA4 kindly asks SA2 and RAN2 to take the above information into account and provide answers to the above question. SA4 welcomes any additional feedback on potential usage and value of signaling RTP retransmission related information to the network.

**3. Dates of Next SA4 Meetings:**

SA4#132 19th – 23rd May 2025 Fukuoka, Japan

SA4#133-e 21st – 25th July 2025 online