**3GPP TSG-SA WG4 Meeting #131-bis-eS4-250444**

**Online, 11 – 17 April 2025**

Title: Draft LS to SA2 and CT4 on N6-Unmarked PDUs

Response to: -

Release: Rel-19

Work Item: 5G\_RTP\_Ph2

Source: SA4

To: SA2, CT4

Cc: -

**Contact Person: Serhan Gül (serhan.guel@nokia.com)**

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

Attachments:

* 26522-0012revX: SDP signaling for N6-unmarked PDUs
* 26113-0015revX: Enhancements to RTC Dynamic Policy API for N6-unmarked PDUs

**1. Overall Description:**

In Rel-18, SA2 has agreed that the PSA UPF marks, in the downlink, each N6-unmarked PDU with PDU Set Information into a PDU Set. If the UPF receives a PDU that does not belong to a PDU Set, the UPF still maps it to a PDU Set based on the Protocol Description.

This implies that for N6-unmarked PDUs, the UPF must determine the PDU Set Information. Some elements of this information can be derived directly – for instance:

* The PDU Sequence Number within a PDU Set (PSN) is equal to zero, since the resulting PDU Set contains only one PDU.
* The PDU Set Size (PSSize) corresponds to the size of the single N6-unmarked PDU placed into the new PDU Set.

However, for PDU Set Importance (PSI) the UPF can only assign a preconfigured value, which may not reflect the application requirements. From a service perspective, it is more desirable that PSI is provided by the sender applications, as they are best positioned to determine the relative importance of the N6-unmarked PDUs (e.g. RTCP, STUN, N6-unmarked audio PDUs) for the application. Motivated by this observation, SA4 concluded in TR 26.822 that introducing signaling to indicate sender-defined PSI values for N6-unmarked PDUs to the network would be beneficial.

During SA4#131-bis-e, SA4 progressed two CRs to enable PSI signaling for N6-unmarked PDUs within the RTC architecture defined in TS 26.506:

* **CR 26113-0015revX: SDP signaling – Agreed**
  + Introduces a new SDP attribute to indicate PSI for N6-unmarked PDUs from the Media AS to the Media Client.
* **CR 26522-0012revX: RTC Dynamic Policy API enhancement – Endorsed**
  + Enables the RTC Media Client to include PSI mapping for N6-unmarked PDUs as part of the media transport protocol parameters in the Application Flow Description sent to the 5GC for an application flow.
  + NOTE: The media transport protocol parameters (defined in clause 7.3.3.2 of TS 26.510) are of data type Protocol Description (defined in clause 5.5.4.13 of TS 29.571). Therefore, SA4 deferred the agreement of this CR until after the required changes are made to the Protocol Description.

As SA2 is responsible for defining the Stage-2 procedures related to PDU Set based handling and the usage of Protocol Description in the 5GC, SA4 would like to confirm with SA2 that appropriate signaling is in place to support the usage of the Protocol Description for N6-unmarked PDU information (for setting PDU Set importance) as provided by RTP senders.

SA4 also would like to point out that the Protocol Description data type (defined in clause 5.5.4.13 of TS 29.571) needs to be enhanced to accommodate the additional N6-unmarked PDU information. SA4 kindly asks CT4 to implement the required changes and inform SA4 if further information is necessary.

**2. Actions:**

**To SA2**

**ACTION:** SA4 kindly asks SA2 to take the above information into account for potential extensions to their specifications.

SA4 kindly asks CT4 to implement the required changes and inform SA4 if further information is necessary.

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

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

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