**Source: Huawei (Rapporteur)**

**Title: KI#4 and KI#5, key questions for company view collection**

This document is to collect company views on key questions of KI#4 and #5 to facilitate the following conclusion discussion. Please kindly provide your company views on the following questions before EoB of Sep 16th. The rapporteur will collect the views and propose summary/way forwards/SoH for further discussion afterwards.

### Q1: How does UPF identify DL PDU Set info?

* Option 1: use existing IETF RTP/SRTP RFC and draft
* Option 2: Define/extend N6 protocols to carry related info
  + Option 2.1: extend GTP-U protocol
  + Option 2.2: extend HTTP header (S2-2205830)
  + Option 2.3: extend RTP header
* Option 3: UPF implementation based on e.g. traffic characteristics.
* Option 4: UPF interacts with NWDAF(S2-2205838)

**[Qualcomm's view]**

**Position:** Option 1, Option 2.3 and Option 3

**Justification**: Options 1 and 3 should be supported without requesting to from SA4. Option 2.3 should be confirmed by SA4.

Option 2.1 is not recommended because it would make the PDU Set enhancements strictly dependent on the adoption of a 3GPP defined interface.

Option 2.2 is not recommended because HTTP is not used for XR traffic.

Option 4 is not needed, because Options 1, 2.3 and 3 can address the issue without interacting with the NWDAF.

### Q2. How to deliver PDU Set importance information to RAN:

* Option 1: use different QoS Flows with different priority level. PDU Set importance is mapped to existing QoS flow priority.
* Option 2: use one QoS flow for different PDU Set with different priority level
  + Option 2.1: use different sub-QoS Flow within one QoS Flow, and using sub-QoS flow Identifier in GTP-U header
  + Option 2.2: use PDU Set importance information in GTP-U header

**[Qualcomm's view]**

**Position:** Option 1

**Justification**: The addition of sub-QoS Flows or PDU Set importance information in the GTP-U header would introduce unnecessary complexity in the system.

### Q3: Support to PDU Set dependency-based scheduling

* Option 1: Identify accurate dependency relationship between PDU Sets for scheduling.
* Option 2: In some scenario (e.g. closed GOP), the decoding of the non-I frames between two successive I frames always directly or indirectly relies on the 1st I frame of the two successive I frames. If the 1st I frame is in error, the non-I frames can be dropped until the next I frame. (proposed in S2-2205839)
* Option 3: If a PDU Set is depended by others, it can be considered as more important during scheduling. But the scheduling will not further consider the accurate dependency relationship.

**[Qualcomm's view]**

**Position:** None of the above

**Justification**: The scheduling in the RAN should be the *regular* scheduling based on the QoS characteristics values of the QoS flow, n particular the QoS Flow’s priority level.

### Q4. Support to hierarchical PDU Set:

* Option 1: introduces PDU Set group. (S2-2205938)
* Option 2: not support.

**[Qualcomm's view]**

**Position:** Option 2 (do not support)

**Justification**: The addition PDU Set groups would introduce unnecessary complexity in the system

### Q5. On “*Whether to drop a PDU Set in case PSDB is exceeded*”, do we need further define “*PDU Set Discard Time*” (A PDU Set shall be dropped in case this time is exceeded (sol 25 etc):

* Option 1: Support
* Option 2: not support.

**[Qualcomm's view]**

**Position:** Option 1 (support), but with clarification.

**Justification**: A PDU Set shall NOT be dropped if its PSDB is exceeded; on the contrary the 5G system should keep trying to deliver a PDU-set even after its PSDB is exceeded, since the PDU-set can be useful for decoding subsequent frames. The PSDT can be introduced and used to support the configuration of scheduling and link layer functions (e.g., the setting of scheduling priority weights and HARQ target operating points).