**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)

**[ZTE view]**

**Position:** Support Option 1, Option 2.1 and option 3 in this TR.

**Justification**:

Option 1 and option 3 do not have standardization effort.

Option 2.1 needs to specify the N6 interface which is normally out scope of 3GPP. However the XR server can deliver header information to UPF via non-standard header to assist XR traffic detection. We think this method falls into option 3.

Option 2.2 and 2.3 have dependency on IETF which seems not possible at this stage.

Option 4 is not feasible because NWDAF only provides not real time analysis. The prediction cannot be used by the UPF to do traffic binding.

### 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

**[ZTE view]**

**Position:** We prefer Option 2.2.

**Justification**:

Option 1 may cause out of order problem since the RAN may bind the QoS Flows into different DRBs.

We don’t see the need of define sub-QoS Flow concept. It is not meaningful to support multiple priorities within one QoS flow. Actually we don’t see any difference with multiple QoS flows.

We also think Option 2.2 should be considered together with Q3.

### 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.

**[ZTE view]**

**Position: We prefer Option 1.**

**Justification**: The RAN needs to know which PDU set that the current PDU set is depending on, otherwise it is meaningless to use this parameter for scheduling.

For option 2 we believe it is possible scenario.

For Option 3, it only addresses how to schedule the more important PDU set, but it does not address how to schedule the less important PDU set if the more important PDU set is not transmit successfully. So it is not full solution option.

### Q4. Support to hierarchical PDU Set:

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

**[ZTE view]**

**Position: Option 1**

**Justification**: In order to indicate the accurate dependency relationship between PDU Set, we believe PDU Set Group is one simple solution, i.e. the first PDU set within the group is more important than the other PDU set within same PDU set group.

### 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.

**[ZTE view]**

**Position:** We prefer option 2

**Justification**: The question can be answered after we conclude the PSDB.

So far we don't think the need to define PDU Set Discard Time.