**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)

**[China Mobile]**

**Position: prefer option1, option 2.1, option2.3, option3**

**Justification**:

For option1, it is better to reuse the existing RTP protocol.

For option 2.1, the close cooperation between application and operator’s edge platform is expected. So option 2.1 is also preferred.

For option2.3, the RTP extension can bee accepted.

For option3, this is also an acceptable way to let the UPF identify the PDU set.

### 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

**[China Mobile]**

**Position: prefer option1, can also accept 2.1**

**Justification**:

For option1, there is no specific requirement for NG-RAN, and is easy to be introduced.

For option 2.1, some enhancement in RAN maybe needed. For option2.2, seems no need to support.

### 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.

**[China Mobile]**

**Position: Prefer option2, can also accept option3**

**Justification**: We consider option2 as a valid scenario for media service, even this is not a common feature for all media service. We can also accept option3 and considered as a more simple way to help consider the PDU set dependency feature.

### Q4. Support to hierarchical PDU Set:

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

**[China Mobile]**

**Position:** Suggest clarifying the concept of PDU set group and the necessity of PDU set group related parameters

**Justification**:

If we consider PDU set as frame, the PDU set group can be considered as GOP. For GOP, the possible use case is if the I frame of the GOP is dropped, the other frames of GOP should be considered with low priority or also be dropped.

### 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.

**[China Mobile]**

**Position: Option2**

**Justification**: This aspect can be realized by RAN implementation.