**3GPP TSG-WG SA2 Meeting #161S2-2403513**

**Athens, Feb 26 – Mar 1, 2024 (revision of S2-2402228)**

**Source: China Mobile**

**Title: 5GS enhancement on QoS monitoring enhancement**

**Document for: Approval**

**Agenda Item: 30.2**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

Title: 5GS enhancement on QoS monitoring enhancement

Acronym: TEI19\_QME

Unique identifier :

Potential target Release: Rel-19

# 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  |  |  X | X |  |
| No | X  | X |  |  | X |
| Don’t know |  |  |  |  |  |

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
| X | Feature |
|  | Building Block |
|  | *Work Task* |
|  | Study Item |

## 2.2 Parent Work Item

For a brand-new topic, use “N/A” in the table below. Otherwise indicate the parent Work Item.

|  |
| --- |
| Parent Work / Study Items  |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
| N/A |  |  |  |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
|  Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# 3 Justification

The QoS monitoring is quite useful for particular URLLC services, mandate QoS guarantees from the network. The current specifications have defined the details of QoS monitoring, including the monitored QoS parameters (e.g., UL packet delay, DL packet delay, round trip packet delay, congestion, Data Rate, Packet Delay Variation, round trip packet delay when UL and DL are on different QoS flows).

But several enhancements are still needed.

* The QoS monitoring capability negotiation is missing. The measurement of QoS parameters and reports of the measurement result need to be supported by RAN and UPF, and we may not assume that all the RAN(s) and UPF(s) support the QoS monitoring. So the SMF need to know whether the RAN support Qos monitoring.

This work item proposes to introduce QoS monitoring capability negotiation mechanism.

# 4 Objective

The objective of this WID is to study the enhancement of QoS monitoring:

* Introduce QoS monitoring capability negotiation mechanism between RAN and 5GC (e.g. UPF, SMF).

This work will require 0.5 TU to discuss and agree the corresponding CR(s).

# 5 Expected Output and Time scale

|  |
| --- |
| **New specifications** *{One line per specification. Create/delete lines as needed}* |
| Type  | TS/TR number | Title | For info at TSG#  | For approval at TSG# | Remarks |

|  |
| --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
| TS 23.501 | General statement about QoS monitoring capability negotiation; | SA#106(Dec 2024) |  |
| TS 23.502 | PDU Session Establishment procedure is updated to support QoS monitoring capability negotiation.  | SA#106(Dec 2024) |  |

# 6 Work item Rapporteur(s)

Aihua Li, China Mobile <liaihua@chinamobile.com>

# 7 Work item leadership

SA2

# 8 Aspects that involve other WGs

None identified.

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| China Mobile |
| ZTE |
| Tencent |
| Tencent Cloud |
| CATT |
| China Telecom |
| vivo |
| SK Telecom |
| KPN |
| China Unicom |
| Huawei |
|  |
|  |