**3GPP TSG-RAN WG3 Meeting #127bis R3-252367**

**Wuhan, China, 7-11 April 2025**

**Agenda Item: 21.3**

**Source: Ofinno**

**Title: (TP to BL CR for TS 37.340) Support of PDU set based QoS handling enhancement**

**Document for: Approval**

# Introduction

In RAN #107 meeting, the following objectives were added for WID on XR Phase 3 [2]:

*- Support and specify multi-modality awareness for QoS flows in both DL and UL RAN [RAN3]:*

*- Specify uplink congestion signalling [RAN2, RAN3]:*

*- Specify in MAC layer XR rate control signalling over downlink per QoS flow/per DRB and the associated F1 signalling, if any, to enable faster source rate adaption to uplink congestion.*

*- Support of PDU set based QoS handling enhancement [RAN3]:*

*- Support of DL PDU Set marking without PDU Set QoS*

*- Support of Alternative PDU Set QoS, which may contain UL and/or DL PDU Set QoS Parameters (i.e. UL PSDB, DL PSDB, UL PSER and/or DL PSER).*

*- QoS Handling when Traffic Characteristics Change Dynamically [RAN3]*

*- TTNB and burst size to be provided over GTP-U*

*- Support of exposure of available data rate [RAN3]*

*Note: Coordination with SA2, as needed*

This contribution provides text proposal (TP) for TS 37.340 to reflect the change for supporting of PDU set based QoS handling enhancement.

# Text Proposal for TS 37.340

<<<<<<<<<<<<<<<<<<<< Start of Change >>>>>>>>>>>>>>>>>>>>

10.13.2 MR-DC with 5GC

The Notification Control Indication procedure may be initiated either by the MN or by the SN and is used to indicate that GFBR/PSER/PSDB for one or several QoS flows cannot be fulfilled any more or can be fulfilled again by the reporting node.

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**Figure 10.13.2-1: Notification Control Indication procedure**

Figure 10.13.2-1 shows an example signalling flow for the Notification Control Indication procedure.

1. The MN may, for an SN terminated bearer, indicate, that the GFBR/PSER/PSDB requested from the MN cannot be fulfilled anymore.  
In case the SN terminated bearer is configured as a split bearer, the SN may decide to increase the share provided by the SN or it may decide to notify the MN that resources requested for the SN terminated bearer cannot fulfill the GFBR/PSER/PSDB any more.

2. Continuing the example message flow from step 1, the SN informs the MN that the GFBR/PSER/PSDB for an SN terminated bearer cannot be fulfilled any more.

3. The MN decides to inform the 5GC that NG-RAN cannot fulfill the GFBR/PSER/PSDB for a GBR QoS flow any more.

<<<<<<<<<<<<<<<<<<<< End of Change >>>>>>>>>>>>>>>>>>>>