3GPP TSG-RAN WG2 #130 R2-250xxxx

**St. Julians, Malta, May 19 – May 23, 2025**

**Agenda item:**8.7.1 (NR\_XR\_Ph3-Core)

**Source:** LG Electronics

**Title:** Discussion of [POST129bis][504][XR] PDCP running CR (LGE)

**Document for:** Report

# 1. Introduction

This document summarizes the discussion of the following offline discussion.

* [POST129bis][504][XR] PDCP running CR and open issues (LGE)

 Scope:

* Update and review the CR
* List open issues related to the CR

 Intended outcome:

* Running CR for endorsement in the next meeting
* List of open issues for discussion at the next meeting

 Deadline: April 29, 10:00 UTC

# 2. Contact information

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# 3. Comments to the PDCP running CR v01

Companies are invited to list their comments on v01, using comment identifier (company ID and number), e.g. LGE001. The rapporteur will provide update based on the comments in proper time.

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| Comment identifier | Section | Comments and/or change suggestions | Rapporteur resolution |
| OPPO001 | 3.1 | We understand that the Rapporteur intends to resolve the COUNT issue mentioned by companies in the last meeting. However, we think the following text somehow depends on when the UE assigns SN. Note that the non-delay-reporting data ahead of delay-reporting data can include both the data with low importance associated with the same channel and the data associated with other channel with higher LCH priority.**Non-delay-reporting PDCP SDU**: a non-delay-reporting PDCP SDU associated with the i:th *dsr-ReportingThreshold* is a PDCP SDU that will be transmitted prior to the PDCP SDU with the largest COUNT value among the delay-reporting PDCP SDUs associated with the i:th *dsr-ReportingThreshold*.Thus, we suggest the text below for a more generic description of Non-delay-reporting PDCP SDU:**Non-delay-reporting PDCP SDU**: a non-delay-reporting PDCP SDU associated with the i:th *dsr-ReportingThreshold* is a PDCP SDU that will be transmitted prior to any one of the delay-reporting PDCP SDUs associated with the i:th *dsr-ReportingThreshold*. |  |
| HW001 | 3.1 | Similar comment to Opp001. We are just wondering whether we need to keep the ‘largest COUNT’ since we are not comparing with another COUNT value of the PDCP SDU in the previous version. We think we can simplifiy it as follow :**Non-delay-reporting PDCP SDU**: a non-delay-reporting PDCP SDU associated with the i:th *dsr-ReportingThreshold* is a PDCP SDU that will be transmitted prior to each of ~~the PDCP SDU~~ ~~with the largest COUNT value among~~ the delay-reporting PDCP SDUs associated with the i:th *dsr-ReportingThreshold*.Oppo suggestion is also fine with us. |  |
| HW002 | 5.x | On the Editor’s Note, we think this is not needed as we think that it does not impact the triggering on PDCP, as only RLC knows whether all PDUs within the PDU set has been transmitted. Basically, Tx PDCP entity can indicate the SDU that requires auto-retx or polling. But whether to perform the auto-retx or polling can be left to RLC layer to decide, including whether to handle PDU-set based processing if pduSet-Discard is enabled. Hence the Editor’s Note here can be removed and will comment |  |
| Z001 | 5.16.1 | When *stopReTxObsoleteSDU* is set to enabled, and indicated from upper layer (e.g. PDCP) to discard a particular RLC SDU, the RLC SDU or SDU segment will not be transmitted or retransmitted, and the peer PDCP entity cannot receive the PDCP SDU. In this case, the discarded PDCP SDU should be included in the PDCP SN gap report. So, suggest to make the following change:5.16.1 Transmit operationFor UM DRBs and AM DRBs configured by upper layers to send a PDCP SN gap report in the uplink (*sn-GapReport* in TS 38.331 [3]), the transmitting PDCP entity shall trigger a PDCP SN gap report when:- the PDCP SDU(s) are discarded as specified in clause 5.3; and- there is at least one stored PDCP SDU(s) which is associated with a COUNT value larger than the COUNT value associated to the discarded PDCP SDU(s); and- *stopReTxObsoleteSDU* is not set and the discarded PDCP SDU(s) have not been submitted by RLC to lower layers, or *stopReTxObsoleteSDU* is set to enabled. |  |
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# 4. Comments to the PDCP running CR v02

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| Comment identifier | Section | Comments and/or change suggestions | Rapporteur resolution |
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# 5. Comments to the PDCP running CR v03

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| Comment identifier | Section | Comments and/or change suggestions | Rapporteur resolution |
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# 6. Open issues

The following editor’s NOTE have been kept in the current running CR

* Issue 1: It is FFS which delay-reporting PDCP data volume shall consider PDCP Control PDUs, the PDCP SDUs to be retransmitted, and the PDCP Data PDUs to be retransmitted.
* Issue 2: It is FFS for which PDCP SDU the transmitting PDCP entity shall trigger RLC autonomous retransmission and polling, if *pdu-SetDiscard* is configured.

In addition, following open issues are identified during e-mail discussion.

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