3GPP TSG-RAN WG3 Meeting #123 R3-240901

Athens, Greece, 26th February – 1st March 2024

Agenda Item: 9.1.9.1

Source: Lenovo (moderator)

Title: SoD of CB: # QoE1\_Inactive CB: # XR2\_ECNMarkingDiscard

Document for: Approval

# Introduction

This contribution provides the summary of offline discussion on:

**CB: # XR2\_ECNMarkingDiscard**

**- Check ECN marking corrections**

**- Discuss the open issues related to PSU Set Discard and capture agreements**

(moderator - Lenovo)

Summary of offline disc [R3-240901](Inbox%5CR3-240901.zip)

# For the Chairman’s Notes

# Discussion

## UL PSI based discard

***Issue 1: Which procedure is used for the new PSI based discard indication, UE context setup/modification procedure or DL RRC message transfer procedure?***

During online discussion, it was agreed that:

**For UL: Introduce a per DRB new indication in F1AP from CU to DU**

But it is still open for which procedure the new indication should be included:

**UE context setup/modification procedure or RRC message transfer procedure?**

**Proposal 1: the xxxx procedure is used for the new PSI based discard indication.**

## DL PSI based discard

***Basic function:***

**Proposal 2: Add the PSI based Discard timer in the PDCP configuration IE in E1AP.**

How to use the PSI based discard timer for DL PSI based discard is up to gNB-CU-UP’s implementation.

***Other enhancements:***

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| [R3-240492](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240492.zip) | Support of PSI based discard (Huawei, Qualcomm, Lenovo) | discussion |

***Proposal 4:* The gNB-DU can send the suggestion on DL PSI based SDU discard activation/deactivation to the gNB-CU-UP if DL PSI-based discard is configured.**

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| [R3-240580](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240580.zip) | Discussion on PDU Set discarding and other topics (Ericsson) | discussion |

**Proposal 1: Introduce PSI in F1-U DL USER DATA frame.**

**Proposal 2: Introduce information on transmitted PDCP PDU Set SN and discarded PDCP PDU Set SN information in the F1-U DL Data Delivery Status frame.**

**Proposal 3: Introduce the PDU Set transmission status in the E1 Bearer Modification Request / Response messages and in the Xn SN Status Transfer message**

**Proposal 5: The gNB-DU provides the discarding status result (on, off) in the UL RRC MESSAGE TRANSFER message.**

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| [R3-240298](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240298.zip) | Support of DL PSI-based discard and UL Traffic Information (Xiaomi) | CR0108r, TS 37.483 v18.0.0, Rel-18, Cat. F |

**Proposal: Introudce a Uplink Traffic Information IE in *QoS Flow QoS Parameters List* IE**

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| [R3-240217](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240217.zip) | Corrections for PDU set related issues (Lenovo) | discussion |

1. **Once gNB-CU reconfigures the PSI-based discard timer for DRBs of the UE, the gNB-CU informs gNB-DU that the PSI-based discard timer is reconfigured for the DRB(s).**

## ECN Marking

**Issue 1:**

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| [R3-240218](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240218.zip) | Corrections on ECN Marking (Lenovo, Huawei, CATT) | CR1065r, TS 38.413 v18.0.0, Rel-18, Cat. F |
| [R3-240438](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240438.zip) | Report the ECN Marking or Congestion Information Reporting Status during Xn-HO and NG-HO (Nokia, Nokia Shanghai Bell) | CR1094r, TS 38.413 v18.0.0, Rel-18, Cat. F |

**Proposal 1a: Add the ECN Marking or Congestion Information Reporting Status IE in the Path Switch Request Transfer IE and Handover Request Acknowledge Transfer IE.**

**Proposal 1b: take** [**R3-240438**](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240438.zip) **as starting point for proposal 1a.**

**Issue 2:**

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| [R3-240497](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240497.zip) | Correction on ECN marking for L4S and data forwarding (Huawei, Lenovo, CMCC, Deutsche Telekom) | draftCR |

**Proposal 2a: Add the description about how the gNB perform ECN marking for L4S in 38.300.**

**Proposal 2b: Take** [**R3-240497**](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240497.zip) **as starting point for proposal 1b.**

**Issue 3:**

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| [R3-240697](file:///D%3A%5C%E4%BC%9A%E8%AE%AE%E7%A1%AC%E7%9B%98%5CTSGR3_123%5CDocs%5CR3-240697.zip) | Corrections to TS 37.483 to support XR (ZTE, CATT, CMCC, China Telecom) |

**Proposal 3a: reports the editorial change to E1 rapporteur. The other change can be discussed in PDU set offline discussion.**

# References