3GPP TSG-RAN WG3#126 R3-247818

Orlando, USA, 18-22 Nov 2024

Agenda Item: 8.1

Source: Huawei (Moderator)

Title:

Document for: Discussions & Approval

# Introduction

This is to kick off the following CB

**CB: # 26\_PDCPSN**

**- Check all the solutions in the table**

**- if no consensus, stop the discussion in R18**

(moderator - HW)

Summary of offline disc [R3-247818](Inbox/R3-247818.zip)

# For Chairman’s notes

<TBD>

Summary for Chair Notes:

# 3 Discussion

## 3.1 How to proceed with the discussion?

There are 3 solutions on the table, for solving the PDCP SN gap report in case of UE handover.

* **Alternative 1: The source gNB forwards the SN gap report to the target gNB.**
* **Alternative 2: The source gNB indicates the discarded SDUs as received in the SN STATUS TRANSFER.**
* **Alternative 3: The UE sends the PDCP SN gap report again after connecting to the target gNB.**

Alternative 1 and 2 are network-based solutions, while Alternative 3 requires UE behaviour change. Since different companies have different understanding on whether the alternative 3 can be supported by existing R18 UE without any change, we may need to confirm with RAN2 on the feasibility of Alt 3 in R18 first, and then decides whether to continue discuss this issue in RAN3.

Companies are invited to provide feedback on how to proceed with the solutions.

**Question 1**: **Which way do you prefer to move on?**

**Option 1: Discuss Alternative 1 and 2 in RAN3 directly.**

**Option 2: Ask RAN2 to check the feasibility of Alternative 3 in R18 first, and continue the discussion in RAN3 about Alternative 1 and 2 if RAN2 provides negative feedback.**

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| --- | --- | --- |
| Company | Preferred Option | Comments |
| Huawei | Option 1 | We can accept option 2 if companies con not converge on option 1. |
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**Question 2** : If you are ok with sending LS to RAN2, please review the content in next page for the draft LS and share your comments directly.

**Summary :**

# Annex. LS out for Alternative 3

**3GPP TSG-RAN WG3 Meeting #126 R3-24xxxx**

**Orlando, USA, 18-22 November, 2024**

**Title: [Draft] LS on PDCP SN gap report handling during UE mobility**

**Response to:**

**Release: Rel-18**

**Work Item: NR\_XR\_enh-Core**

**Source: Huawei (to be RAN3)**

**To: RAN2**

**Cc:**

**Contact Person:**

**Name:** Yuanping Zhu

**Email:** zhuyuanping@huawei.com

**Send any reply LS to: 3GPP Liaisons Coordinator,** <mailto:3GPPLiaison@etsi.org>

**Attachments:** **-**

**1. Overall Description:**

For Rel-18 XR, it is unclear how to handle the PDCP SN gap report during UE’s inter-gNB mobility. If a UE discarded some UL packets before handover, the UE reports the PDCP SN gap report to the source gNB, but the target gNB may not be aware of those discarded if no PDCP SN gap is reported to target gNB. This may result in unnecessary delay in the target gNB.

RAN3 discussed this issue and considers the following solutions:

* Alternative 1: The source gNB forwards the PDCP SN gap report information to the target gNB.
* Alternative 2: The source gNB indicates the discarded SDUs as successfully received via the UL received status in the SN STATUS TRANSFER sent to the target gNB.
* Alternative 3: The UE sends the PDCP SN gap report again after connecting to the target gNB.

RAN3 would like to ask RAN2 to provide feedback on the feasibility of using Alternative 3 assuming no change to Uu interface. Otherwise, RAN3 will discuss the network-based solutions, i.e., Alternative 1 and Alternative 2.

**2. Actions:**

**To RAN2:**

**ACTION:** RAN3 kindly asks RAN2 to provide feedback on the feasibility of using Alternative 3 assuming no change to Uu interface.

**3. Date of Next RAN3 Meetings:**

RAN3#127 17th Feb – 21st Feb 2025 Athens, GR

RAN3#127bis 07th April – 11th April 2025 China, CN