3GPP TSG-RAN WG3 Meeting #125bis R3-245748

Hefei, China, 14th – 18rd October, 2024

Agenda Item: 13.2

Source: Lenovo (moderator)

Title: Summary of offline for two solutions for Inter-CU LTM

Document for: Approval

# Introduction

**CB: # MobilityEnh\_LTM**

**- Capture the agreements of stage-2 and stage-3 for LTM procedures for inter-CU scenarios**

**- working on TPs based on the above agreements.**

**- compare two solutions for Inter-CU LTM (5201, 5676, 5315), and identify the critical issue of each solution if any, capture the views in** [R3-245748](Inbox/R3-235748.zip).

(moderator - CT and Lenovo)

Summary of the offline discussion in [R3-245747](Inbox/R3-235747.zip)

# For the Chairman’s Notes

Some proposals in R3-245315 were discussed.

# Discussion

|  |  |  |
| --- | --- | --- |
| [R3-245315](file:///E%3A%5CTSGR3_125-bis%5CDocs%5CR3-245315.zip) | Impact analysis of coupling LTM cell switch and CU anchor changes on subsequent inter-gNB LTM (Qualcomm Incorporated, Vodafone, NTT DOCOMO, Sony, Bharti Airtel (India)) | DiscussionAdd Jio as co-signRev in [R3-245746](Inbox/R3-235745.zip)noted |

**WID: Inter-gNB + subsequent switch**

**Proposal 1: In compliance with the WID, RAN3 to only support solutions that avoid RRC signaling between subsequent inter-gNB cell switches.**

**Comments during offline discussion:**

Some companies thinks that any security update that requires RRC siganlling are not compliant with WID. But the other companies think it is out of scope of RAN3.

**Signaling overhead:**

**Proposal 3: Similar to Rel-18 subsequent intra-gNB LTM, where backhaul preparation overhead is comparable to that of intra-gNB L3 handover, RAN3 to discuss solutions for subsequent inter-gNB with overall backhaul signaling overhead comparable to that of L3 inter-gNB handover.**

**Comments during offline discussion:**

Some companies including some operators show serious concerns on the signaling storm for subsequent inter-gNB LTM.

**Race conditions:**

**Observation 7a: Subsequent inter-gNB LTM with coupled cell/anchor changes suffers from race conditions:**

* **Between Xn LTM preparation before the cell switch and MAC-CE-based triggering of the cell switch**
* **Between MAC-CE-based triggering of the cell switch and NG path switch procedure after the cell switch, as noted by [Nokia – R2-2407073].**

**Comments during offline discussion:**

Some companies think that race condition which may cause RLF should be addressed.

Some companies think that it is a rare case and good network implementation can avoid it. And the issue should be confirmed by RAN2 firstly.

# References

As listed in the table in the section 3.