3GPP TSG-RAN WG3 #127 R3-250789

Athens, Greece, 17th – 21st , February, 2025

Agenda Item: 11.4

Source: CMCC (moderator)

Title: Summary of Offline Discussion on AI/ML NRDC

Document for: Approval

# Introduction

**Introduce predicted PSCell ID in the DC procedure (e.g., SN Addition, MN-initiated SN change) as one of assistance information?**

**CB: # AIRAN4\_NRDC**

**- Check the open issue above**

**- Capture agreements and provide TP if agreeable**

(moderator - CMCC)

Summary of offline disc [R3-250789](Inbox\R3-250789.zip)

# For the Chairman’s Notes

***… To be included after offline …***

# Discussion

In Tuesday’s online discussion companies showed their views on the following as was captured the Chair’s meeting minutes:

**Introduce predicted PSCell ID in the DC procedure (e.g., SN Addition, MN-initiated SN change) as one of assistance information?**

ZTE, Ofinno, Lenovo, QC : Yes, it’s needed and useful.

HW, LGE: There is no consensus in SI.

Nok: It’s infeasible and complicated

SS: It’s workable.

CATT: Feasible.

Lenovo: The similar infor already has been introduced in mobility cases.

E///: Not only the PSCell but also the SCG bearers

Seems there is no doubts that introducing predicated PSCell as one of assistance information is beneficial on helping SN to select PSCell. However, there are still different views whether MN can predicate PSCell.

Companies are welcome to provide technical opinions on whether it is feasible to provide predicated PSCell in DC procedures (e.g., SN Addition, MN-initiated SN change) in this doc.

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| --- | --- | --- |
| **Company** | **Feasible or not?** | **Comments** |
| CMCC | Yes | In legacy SN Addition and MN-initiated SN Change procedures, MN could provide measurement results of PSCells to the target SN for SN to choose and configure the SCG cell(s), which means MN has the enough input data for AI/ML model to generate the predicted PSCell(s).  In Rel-18, the UE Trajectory Prediction is transferred from source node to target node for AI/ML based Mobility Optimization of single connectivity. UE Trajectory Prediction is provided as a list of cells where the UE is predicted to connect after handover. The similar solution could also apply to NR-DC Mobility Optimization. |

# References

[1] R3-250664, Discussion on AIML based Mobility Optimization for NR-DC (CMCC, CATT, ZTE Corporation, Lenovo)

[2] R3-250089, Mobility Optimization for NR-DC (Ofinno, LLC)

[3] R3-250141, (TP to 38.423) Addition of predicted PSCell ID within DC procedure (ZTE Corporation, Samsung, Qualcomm, CATT, CMCC, China Unicom)

[4] R3-250375, (TP for AI/ML BLCR to TS 38.423) AI/ML-based Mobility Optimization in NR-DC (Huawei)

[5] R3-250142, (TP to 38.423) Discussion on Mobility Optimization for NR-DC (ZTE Corporation)

[6] R3-250172， (TP to BLCR TS38.423) NR-DC mobility optimization (NEC)

[7] R3-250275, Discussion on UE performance metric in AIML for NR-DC (Lenovo)

[8] R3-250277, (TP to BLCR 37.340) AIML for NR-DC (Lenovo, CATT, ZTE Corporation, Samsung)

[9] R3-250343, Discussion on AI/ML based Mobility Optimization for NR-DC (China Telecom)

[10] R3-250344, (TP to TS38.423) Support of AIML based Mobility Optimization for NR-DC (China Telecom)

[11] R3-250381, Discussion on open issue of mobility optimization for NR-DC (LG Electronics Inc.)

[12] R3-250459, AI/ML support for NR-DC (Ericsson, Jio Platforms (JPL), InterDigital, FiberCop)

[13] R3-250460, (TP to TS 38.423) AI/ML support for NR-DC (Ericsson, Jio Platforms (JPL), InterDigital, FiberCop)

[14] R3-250573, Procedures for AI/ML Mobility Optimization in NR-DC (Nokia)

[15] R3-250574, (TP to TS 38.423) AI/ML Mobility for NR-DC (Nokia)

[16] R3-250580, Discussions for AI/ML assisted NR-DC (Jio Platforms JPL)

[17] R3-250595, AI/ML in DC scenario (CATT)

[18] R3-250596, (TP for TS 38.423) Introducing essentially per-DRB UE performance result for DC (CATT)

[19] R3-250618, Discussion on AI/ML for mobility in NR-DC (Samsung)

[20] R3-250665, (TP to 38.423) AIML based Mobility Optimization for NR-DC (CMCC)