3GPP TSG-RAN WG3 Meeting #124 R3-24xxxx

Fukuoka, Japan, from May 20 to May 24 2024

Agenda Item: 11.4

Source: ZTE

Title: [TP for TR38.743] Rel-18 Leftovers

Document for: Discussions & Approval

# Introduction

This TP to reflect the progress for Rel-18 Leftovers.

# 2 Text Proposal

# 5 Rel-18 Leftovers and solutions

*Editor Note: Such topics are listed here for further selection/down selection for normative work.*

## 5.1 Mobility optimization for NR-DC

*Editor Note: Capture the description and its potential standard impacts.*

### 5.1.1 Use case description

Mobility Optimization for NR-DC that the use case is studied assuming inference at the MN. The main use case is limited to dual connectivity only (e.g. no conditional procedures are in scope).

### 5.1.2 Potential Standard impacts

Following is the potential impacts for mobility optimization for NR-DC during normative work phase:

- Enhance legacy Dual Connectivity procedure message to transfer following measured information:

*-* UE performance

## 5.2 Split architecture support for Rel-18 use cases

*Editor Note: Capture the description and its potential standard impacts.*

### 5.2.1 Use case description

The split architecture should be enhanced to support the Rel-18 use cases, .e.g, Load Balancing, Energy Sacing, and Mobility Optimization.

The potential solution of deployment in the case of split architecture:

- AI/ML Model Training is located in the OAM and AI/ML Model Inference is located in the gNB-CU-CP;

- AI/ML Model Training and Model Inference are both located in the gNB-CU-CP.

### 5.2.2 Potential Standard impacts

Following standard impacts is listed for subsequent Rel-19 normative work compared with what was specified during Rel-18.

E1 interface:

* Measured UE performance from DU-UP to CU-UP.

## 5.3 Energy saving enhancements

*Editor Note: Capture the description and its potential standard impacts.*

### 5.3.1 Use case description

### Energy Saving is an important use case for operator. In Rel-18, it was specified that Energy Cost is transferred between gNBs upon request. The further normative work should be done to improve the AI/ML based energy saving.5.3.2 Potential Standard impacts

Following standard impacts is listed for subsequent Rel-19 normative work compared with what was specified during Rel-18.

F1 interface:

* Measured Energy Cost from DU to CU.

## 5.4 Continuous MDT collection targeting the same UE across RRC states

*Editor Note: Capture the description and its potential standard impacts.*

## 5.5 Multiple-hop UE trajectory across gNBs

*Editor Note: Capture the description and its potential standard impacts.*

### 5.5.1 Use case description

In Rel-18, Cell-based UE trajectory prediction is limited to the first-hop target NG-RAN node. Multi-hop UE trajectory across gNBs consists of a list of cells in which the UE will be connected to, and the cells are listed in chronological order and belong to different gNBs.