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

Orlando, USA, 18-22 Nov 2024

**Agenda item: 10.3.2**

**Source: Nokia**

**Title: Summary of an unofficial offline discussion
on SON for network slicing**

**Document for: Discussion**

# 1 Introduction

At RAN3#126, the main online discussion on SON for network slicing is scheduled for the last day and thus there will not be any time for the official offline discussion. Because of this, an unofficial offline discussion was organised to prepare for the online time. This document summarises the conclusions of this unofficial discussion.

# 2 For the meeting notes

# 3 Discussion

## 3.1 Enhancements for MDT to detect idle mobility problems

In [7132,7160,7668,7703,7714] it is proposed to enhance logged MDT so that efficiency of the NSAG efficiency can be monitored.

In [7496], it is proposed to use immediate MDT to record service denials in case UE switches to RRC connected in a cell where slice is not supported.

On the other hand, in [7153], it is argued no such enhancements are needed.

**Agreement proposal 1: RAN3 will request RAN2 to enhance the logged MDT so that efficiency of the NSAG configuration can be monitored (FFS on the details).**

**Agreement proposal 2: RAN3 will request RAN2 to enable reporting events when UE switches to RRC Connected mode in a cell that does not support needed slice (FFS on the details).**

## 3.2 Enhancements to address slice unavailability

In [7132, 7714], it is proposed to enhance SHR to monitor HOs to cells that do not have all needed slices available.

On the other hand, in [7153, 7160], enhancing SHR is considered unnecessary.

**Agreement proposal 3: RAN3 will request RAN2 to enhance the SHR so that it can be generated when UE executes HO to a target cell that does not support all needed slices (FFS on the details).**

In [7496], is proposed to define new MDT measurements to enable detecting holes in the supported slice(s) coverage.

**Agreement Proposal x: RAN3 to work on defining new MDT measurements for supported slice coverage holes detection**

## 3.3 Slice information in UHI/MHI

In [7714], it is proposed to add slice information to the history records.

**Agreement proposal 4: RAN3 will add used slice information to the UHI and will request RAN2 to add the used slice information in the MHI.**

## 3.4 Per-slice HO delay reporting

In [7497], it is proposed to report HO delay per slice in case of any HO.

**Agreement Proposal y: RAN3 to work on network based solutions for collecting per slice user plane interruption time during handovers**

## 3.5 Deferred MDT reporting

In [7496], it is proposed to enable the RAN to provide collected MDT measurements only if certain condition (load level) is fulfilled.

**Agreement Proposal z RAN3 to work on deferred (conditional) immediate MDT measurements collection.**

## 3.6 Abnormal case when Area Scope of MDT-NR IE is not included for XNAP

In [7703], it is propose a TP to introduce an abnormal case for XNAP:

If the *Network Slice Area Scope of MDT* IE is included in the *MDT Configuration-NR* IE in the TRACE START message, and the *Area Scope of MDT-NR* IE is not included, the target NG-RAN node shall ignore the *Network Slice Area Scope of MDT* IE, and consider that the MDT Configuration for NR is applied to all PLMNs indicated in the MDT PLMN List described in TS 32.422 [23].

# References

[7132] R3-247132, [TP to BL CR to 38.300, MDT] MDT solution for slice support and slice-related mobility enhancements (Nokia)

[7496] R3-247496, On MDT enhancements for Network Slicing (Ericsson, T-Mobile US, InterDigital, Jio, Telecom Italia, Deutsche Telekom)

[7703] R3-247703, Further consideration on SON/MDT for Slicing (ZTE Corporation)

[7153] R3-247153, SON MDT for network slicing (Qualcomm Incorporated)

[7160] R3-247160, SON and MDT for Network Slicing (Huawei)

[7497] R3-247497, On SON enhancements for Network Slicing (Ericsson, InterDigital, Jio)

[7498] R3-247498, (TP for BLCR for MDT for TS 38.413) Addition of MDT enhancements (Ericsson)

[7650] R3-247650, Discussion on SONMDT enhancements for network slicing (China Unicom)

[7668] R3-247668, Discussion on SONMDT for network slicing (CMCC)

[7714] R3-247714, Network slicing for SONMDT (CATT)