3GPP TSG-RAN WG3 Meeting #111-e R3-21xxxx

E-meeting, 25 Jan -5 Feb 2021

**Agenda item: 10.2.1.5**

**Source: Nokia, Nokia Shanghai Bell**

**Title: (TP to TS 38.423, NR\_ENDC\_SON\_MDT\_enh-Core) Further clarification of the TNL load**

**Document for: Endorsement**

# 1 Introduction

This document proposes text for a BL CR to XnAP. The proposed clarification relates to the issue of the input for the TNL load information, as described in [R3-210318] and further discussed online.

# 2 Text proposal

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| **\*\*\* First change, omitted text not changed \*\*\*** |

#### 8.4.10.2 Successful Operation



Figure 8.4.10.2-1: Resource Status Reporting Initiation, successful operation

NG-RAN node1 initiates the procedure by sending the RESOURCE STATUS REQUEST message to NG-RAN node2 to start a measurement, stop a measurement or add cells to report for a measurement. Upon receipt, NG-RAN node2:

- shall initiate the requested measurement according to the parameters given in the request in case the *Registration Request* IE set to "start"; or

- shall stop all cells measurements and terminate the reporting in case the *Registration Request* IE is set to "stop"; or

- shall add cells indicated in the *Cell To Report List* IE to the measurements initiated before for the given measurement IDs, in case the *Registration Request* IE is set to "add". If measurements are already initiated for a cell indicated in the *Cell To Report* *List* IE, this information shall be ignored.

If the *Registration Request* IE is set to "start" in the RESOURCE STATUS REQUEST message and the *Report Characteristics* IE indicates cell specific measurements, the *Cell To Report List* IE shall be included.

If *Registration Request* IE is set to "add" in the RESOURCE STATUS REQUEST message, the *Cell To Report* *List* IE shall be included.

If NG-RAN node2 is capable to provide all requested resource status information, it shall initiate the measurement as requested by NG-RAN node1 and respond with the RESOURCE STATUS RESPONSE message.

**Interaction with other procedures**

When starting a measurement, the *Report Characteristics* IE in the RESOURCE STATUS REQUEST indicates the type of objects NG-RAN node2 shall perform measurements on. For each cell, NG-RAN node2 shall include in the RESOURCE STATUS UPDATE message:

- the *Radio* *Resource Status* IE, if the first bit, "PRB Periodic" of the *Report Characteristics* IE included in the RESOURCE STATUS REQUEST message is set to "1". If NG-RAN node2 is a gNB and if the cell for which *Radio* *Resource Status* IE is requested to be reported supports more than one SSB, the *Radio* *Resource Status* IE for such cell shall include the *SSB Area Radio Resource Status Item* IE for all SSB areas supported by the cell. If the *SSB To Report List* IE is included for a cell, the *Radio* *Resource Status* IE for such cell shall include the requested *SSB Area Radio Resource Status List* IE;

- the *TNL Capacity Indicator* IE, if the second bit, "TNL Capacity Ind Periodic" of the *Report Characteristics* IE included in the RESOURCE STATUS REQUEST message is set to "1". The received *TNL Capacity Indicator* IE represents the lowest TNL capacity available for the cell, taking into account the NG and F1 interfaces.

- the *Composite Available Capacity Group* IE, if the third bit, "Composite Available Capacity Periodic" of the *Report Characteristics* IE included in the RESOURCE STATUS REQUEST message is set to "1". If the *Cell Capacity Class Value* IE is included within the *Composite* *Available Capacity Group* IE, this IE is used to assign weights to the available capacity indicated in the *Capacity Value* IE. If NG-RAN node2 is a gNB and if the cell for which *Composite Available Capacity Group* IE is requested to be reported supports more than one SSB, the *Composite Available Capacity Group* IE for such cell shall include the *SSB Area Capacity Value List* for all SSB areas supported by the cell, providing the SSB area capacity with respect to the *Cell Capacity Class Value*. If the *SSB To Report List* IE is included for a cell, the *Composite Available Capacity Group* IE for such cell shall include the requested *SSB Area Capacity Value List* IE.

If the cell for which *Composite Available Capacity Group* IE is requested to be reported supports more than one slice, and if the *Slice To Report List* IE is included for a cell, the *Slice Available Capacity* IE for such cell shall include the requested *Slice Available Capacity Value Downlink* IE and *Slice Available Capacity* *Value Uplink* IE, providing the slice capacity with respect to the Cell Capacity Class Value.

- the *Number of Active UEs* IE, if the fourth bit, "Number of Active UEs" of the *Report Characteristics* IE included in the RESOURCE STATUS REQUEST message is set to "1";

- the *RRC Connections* IE, if the fifth bit, "RRC Connections" of the *Report Characteristics* IE included in the RESOURCE STATUS REQUEST message is set to "1".

If the *Reporting Periodicity* IE in the RESOURCE STATUS REQUEST is present, this indicates the periodicity for the reporting of periodic measurements. the NG-RAN node2 shall report only once, unless otherwise requested within the *Reporting Periodicity* IE.

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| **\*\*\* End of changes, remaining text not changed \*\*\*** |