**3GPP T****SG-RAN WG3 Meeting #121 R3-23xxxx**

**Toulouse, France, 21 – 25 Aug, 2023**

**Title:** (TP to TS 37.480 BL CR) Consideration on remaining issues for MT-SDT

**Source:** Huawei, China Telecom, LG Electronics

**Agenda item:** 20.2

**Document Type:** Other

# Introduction

In this document provides the TP for 37.480 BLCR based on the discussion during RAN3#121 meeting.

# TP to TS 37.480 BL CR

***-----Start of the Change----***

### 5.1.2 E1 bearer context management function

The establishment of the E1 bearer context is initiated by the gNB-CU-CP and accepted or rejected by the gNB-CU-UP based on admission control criteria (e.g., resource not available).

The modification of the E1 bearer context can be initiated by either gNB-CU-CP or gNB-CU-UP. The receiving node can accept or indicate failure to carry out the modification request. The E1 bearer context management function also supports the release of the bearer context previously established in the gNB-CU-UP. The release of the bearer context is triggered by the gNB-CU-CP either directly or following a request received from the gNB-CU-UP.

This function is used to setup and modify the QoS-flow to DRB mapping configuration. The gNB-CU-CP decides flow-to-DRB mapping and provides the generated SDAP and PDCP configuration to the gNB-CU-UP. The gNB-CU-CP also decides the Reflective QoS flow to DRB mapping. The function is also used to send to the gNB-CU-UP the alternative QoS Parameters Sets when available for a QoS flow. For each PDU Session Resource to be setup or modified, the S-NSSAI, shall be provided in the E1 bearer context setup procedure and may be provided in the E1 bearer context modification procedure by gNB-CU-CP to the gNB-CU-UP.

This function is also used to setup and modify the EPS bearer/E-RAB to DRB mapping configuration for the case of eNB-CP and eNB-UP separation. The eNB-CP decides EPS bearer/E-RAB-to-DRB mapping and provides the E-UTRAN/NR PDCP configuration to the eNB-UP.

This function is also used for the gNB-CU-UP to report the MT-SDT data size to the gNB-CU-CP.

This function is used for the gNB-CU-CP to send the security information to the gNB-CU-UP.

This function is used for the gNB-CU-CP to send to the gNB-CU-UP transport layer information to be used for data forwarding e.g., during handovers.

This function is used for the gNB-CU-CP to send the parameters for header compression for certain traffic types e.g., IP, Ethernet to the gNB-CU-UP.

This function is used for the gNB-CU-CP to send the uplink data compression parameters to the gNB-CU-UP for certain data radio bearer(s).

This function is used for the gNB-CU-UP to notify the event of DL data arrival detection to the gNB-CU-CP. With this function, the gNB-CU-UP requests gNB-CU-CP to trigger paging procedure over F1 or Xn to support RRC Inactive state. RRC Inactive state is not supported when this function is used between an eNB-CP and an eNB-UP.

This function is used for the gNB-CU-UP to notify the gNB-CU-CP that a DL packet including a QFI value not configured by the gNB-CU-CP or an UL packet including a QFI value in the SDAP header of the default DRB not configured by the gNB-CU-CP is received for the first time. The gNB-CU-CP can take further action if needed.

This function is used for the gNB-CU-UP to notify the gNB-CU-CP during the SDT procedure that the received DL SDT data crossed the data volume threshold. The gNB-CU-CP can take further action if needed.

This function is used for the gNB-CU-UP to notify the event of user inactivity to the gNB-CU-CP. With this function, the gNB-CU-UP indicates that the inactivity timer associated with a bearer, a PDU session or a UE expires, or that user data is received for the bearer, the PDU session or the UE whose inactivity timer has expired. The gNB-CU-CP consolidates all the serving gNB-CU-UPs for the UE and takes further action.

This function is used for the gNB-CU-UP to report data volume to the gNB-CU-CP.

This function is used for the gNB-CU-CP to notify the suspension and resumption of bearer contexts to the gNB-CU-UP. Suspension and resumption of bearer contexts are not applicable to eNB-CP/eNB-UP and ng-eNB-CU-CP/ng-eNB-CU-UP.

This function also allows to support CA based packet duplication as described in TS 38.300 [6], i.e. one data radio bearer should be configured with at least two GTP-U tunnels between gNB-CU-UP and a gNB-DU.

This function is used to support the enhanced mobility operations as described in TS 38.300 [6] in the gNB-CU-UP.

***-----End of the Change----***