**3GPP T****SG-RAN WG3 Meeting #129 R3-255791**

**Bengaluru, India, 25 – 29 August 2025**

**Agenda item: 10.2**

**Source: Samsung, Huawei, Nokia**

**Title: (TP for SON BLCR for TS38.401) MRO for LTM**

**Document for: Discussion & Decision**

# Introduction

The contribution provides TP to BLCR for TS 38.401 on MRO for LTM.

# TP to 38.401 on MRO for LTM

## 7.X MRO support for LTM

For Too Late LTM cell switch and LTM cell switch to Wrong Cell, there are two sub-cases:

* if the cell where the UE attempts LTM recovery or re-establishment is one of the candidate cells provided by the gNB-CU, it is due to inappropriate cell switch triggering or Wrong target cell selection for LTM cell switch at the source gNB-DU;
* else, it is due to Wrong LTM candidate cell preparation at the gNB-CU.

The gNB-CU receives a RLF report associated to an LTM mobility event from the UE or via the Failure indication message over Xn. The gNB-CU performs initial analysis. In case of failures due to inappropriate cell switch triggering or Wrong target cell selection for LTM cell switch, the gNB-CU may forward the RLF report to the last serving gNB-DU in case of too late LTM cell switch, or to the source gNB-DU in case of too early LTM cell switch or LTM cell switch to wrong cell.

The target gNB-DU identifies that a Beam Failure Recovery (BFR) has happened in the UE shortly after a successful LTM cell switch by detecting that a time gap between the successful LTM cell switch and the BFR in the same cell is smaller than the configured threshold (e.g. Tstore\_UE\_cntxt). The target gNB-DU performs initial analysis and may send the recovery beam information to the source gNB-DU via the gNB-CU.

The target gNB-DU identifies that the UE successfully performs a RACH-based access while re-establishing/recovering to the same target cell. The target gNB-DU may send the re-established/recovery beam information and/or the TA value used at successful RACH-based access to the source gNB-DU via the gNB-CU.