**3GPP TSG-RAN WG3 Meeting #120 R3-233450**

**Incheon, KR, 22 May – 26 May, 2023**

**Title:** (TPs for SON BLCR for TS 36.300): Naming update for RA report

**Source:** Huawei

**Agenda item:** 10.2.3

**Document Type:** other

# 1. Introduction

This document contains a TP to SON BLCR for TS 36.300 for RACH optimisation .

# Annex: TP to TS 36.300 BL CR

### 22.4.3 Support for RACH Optimisation

#### 22.4.3.1 General

The aim of this function is to support RACH Optimisation. RACH optimisation is supported by UE reported information and by RACH parameters exchange between:

- E-UTRA cells;

- NR cells, in case of EN-DC.

#### 22.4.3.2 Solution description

##### 22.4.3.2.1 E-UTRA cell case

The setting of RACH parameters that can be optimized are:

- RACH configuration (resource unit allocation);

- RACH preamble split (among dedicated, group A, group B, RSRP level, NRSRP level (for NB-IoT), NPRACH resource pools (for NB-IoT), EDT);

- RACH backoff parameter value;

- RACH transmission power control parameters.

RACH optimisation is supported by UE reported information and by PRACH parameters exchange or NPRACH parameters (for NB-IoT) between eNBs.

UEs which receive polling signalling shall report the below information:

- Number of RACH preambles sent until the successful RACH completion;

- Contention resolution failure;

- For BL UE or UE in enhanced coverage or NB-IoT UE, the RSRP (NRSRP for NB-IoT) level in which the UE started the random access procedure;

- For BL UE or UE in enhanced coverage or NB-IoT UE, an EDT fallback indication.

UE reporting of RACH information is not supported for a NB-IoT UE using the Control Plane CIoT EPS Optimisation,

##### 22.4.3.2.2 NR cell in EN-DC case

The solution applies to an en-gNB supporting EN-DC operation. RACH optimisation is supported by UE reported information (RA report, see TS 38.300 [79]) made available at the eNB and further forwarded to the en-gNB, and by PRACH parameters exchanged (see TS 38.300 [79]) between en-gNBs and eNBs.