3GPP TSG-RAN WG3 Meeting #122 R3-23xxxx

**Chicago, USA, 13th – 17th Nov 2023**

**Agenda item: 10.2.1**

**Source: Samsung**

**Title:** **(TP for SON BLCR for TS38.300) SON enhancement for SHR**

**Document for: Discussion and Decision**

# **1 Introduction**

This contribution provided a TP on SHR based on the agreements in RAN3#122 meeting.

# **Annex 2: TP for TS38.300**

#### 15.5.2.7 Successful HO

One of the functions of Mobility Robustness Optimization is to detect a sub-optimal successful handover event. The aim is to identify underlying conditions during successful ordinary handovers, successful DAPS handovers, or successful Conditional handovers.

For analysis of successful handover, the UE supports Successful Handover Report based on configuration by network, if received, and makes the Successful Handover Report available to the network as specified in TS 38.331 [12].

The UE stores the Successful Handover Report until the Successful Handover Report is fetched by the network or for 48 hours after the Successful Handover Report is recorded.

For SHR collected during intra-NR handover, when the target NR node fetches the Successful HO Report from UE and the trigger of SHR is T310/T312, it forwards the information to the source node, i.e the node handling the cell reported as source cell in this Successful HO Report, by using the ACCESS AND MOBILITY INDICATION message over Xn or by means of the Uplink RAN configuration transfer procedure and Downlink RAN configuration transfer over NG.

When the NG-RAN Node fetches the Successful HO Report from UE is neither source node nor target node of the handover, it may forward the information to the node(s) which configured the Successful HO Report trigger causing the Successful HO Report to be generated, by using the ACCESS AND MOBILITY INDICATION message over Xn or by means of the Uplink RAN configuration transfer procedure and Downlink RAN configuration transfer over NG.

Upon retrieval of a Successful Handover Report, the receiving node may analyse whether its mobility configuration needs adjustment.

For SHR collected during intra-system inter-RAT HO from NR to LTE, in case of failure shortly after successful Handover, the source NR node performs the correlation between the SHR report and the RLF Report based on the time from handover command to the reporting of the SHR reporting, the time since failure to the reporting of RLF Report and the target- CRNTIs received in the RLF Report and the SHR. In this case, the source NR node may ignore the received SHR and only count the RLF report.

The SHR report can be used to detect one case of Intra-system Too Late Handover, namely when DAPS HO is configured but an RLF is detected in the source cell during a successful DAPS HO.