3GPP TSG-RAN WG3 Meeting #114bis-e R3-221257

17-26 Jan 2022

**Agenda item: 20.2.1**

**Source: Nokia, Nokia Shanghai Bell**

**Title: (TP for BL CR for TS 38.300) mapped cell ID determination after AS security and TAC reporting**

**Document for: Discussion & decision**

This contribution proposes Stage-2 TP per CB: # 2002\_NTN\_NWID.

# TP for BL CR for TS38.300

### 16.x.5 Signalling

The Cell Identity, as defined in TS 38.413 [26] and TS 38.423 [x], used in following cases corresponds to a Mapped Cell ID, irrespective of the orbit of the NTN payload or the types of service links supported.

- The Cell Identity indicated by the gNB to the Core Network as part of the User Location Information;

- The Cell Identity used for Paging Optimization in NG interface;

- The Cell Identity used for Area of Interest;

- The Cell Identity used for PWS.

The Cell Identity included within the target identification of the handover messages allows identifying the correct target cell.The Cell Identities used in the RAN Paging Area during Xn RAN paging allow the identification of the correct target cells for RAN paging.

NOTE: The Cell Identity used for RAN Paging is assumed to typically represent a Uu Cell ID.

The mapping between Cell Identities and geographical areas is configured in the RAN and Core Network.

The gNB is responsible for constructing the Mapped Cell ID based on the UE location info received from the UE. The mapping may be pre-configured (e.g., up to operator’s policy) or up to implementation.

NOTE: As described in TS 23.501 [3], the User Location Information may enable the AMF to determine whether the UE is allowed to operate at its present location. Pre-configuration of special mapped cell identifiers may be used to indicate areas outside the serving PLMN’s country.

The gNB reports the broadcasted TAC (single or multiple) of the selected PLMN to the AMF as part of ULI. In case the gNB knows the UE’s location information, the gNB may determine the TAI the UE is currently located in and provide that TAI to the AMF as part of ULI.