3GPP TSG-RAN WG3 Meeting #124 R3-243862

**Fukuoka, Japan, 20-24 May, 2024**

Agenda Item: 12.2

Source: ZTE

Title: (TP to TR 38.799) on other issues

Document for: other

# 1 Introduction

This contribution is to provide TP to TR 38.799 on miscellaneous issues according to the following CB:

CB: # WAB

* Resolve the FFS captured above
* Converge on the TPs below, where agreements taken above will be captured. If any more agreements are taken, they can be included in the TPs below:
  + TP for Architecture (Nokia)
  + TP for Integration procedure (Huawei)
  + TP for Authorization (CATT)
  + TP for Mobility (Ericsson)
  + TP for miscellaneous issues (ZTE)
    - WAB configuration
    - Etc
* SA2 reply LS (Qualcomm)
* (Moderator – Docomo)

Summary of offline disc in R3-243844

# Annex. TP for TR 38.799 V0.0.1

-------------------------------------------Start of changes-------------------------------------------

## 3.1 Terms

For the purposes of the present document, the terms given in TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

**BH-RAN-node: An NG-RAN node serving the WAB-MT.**

**BH-gNB: The gNB serving the WAB-MT.**

**BH-AMF: The AMF serving the WAB-MT.**

**BH-5GC: The 5GC serving the WAB-MT.**

**BH-UPF: The UPF serving the WAB-MT for backhauling.**

**UE´s 5GC: The 5GC connected to the WAB-gNB and serving the UEs.**

**UE´s AMF: The AMF connected to the WAB-gNB and serving the UEs.**

**UE´s UPF: The UPF connected to the WAB-gNB and serving the UEs.**

-------------------------------------------Next change-------------------------------------------

## 4.3 Operational aspects

Editor Note:

- Impact of WAB mobility within an existing RAN (e.g., inter-gNB neighbour relations).

- Inter-gNB- and gNB-to-CN signalling to address the support of WAB.

### 4.3.x Configuration of WAB-nodes

Certain configurations of the WAB-node may need to be updated as the node moves, e.g.:

* The parameters that enable the WAB-gNB to select and connect to the AMF(s) to serve the UE(s) .
* The parameters that enable the WAB-gNB to connect to, and communicate with, the OAM system.
* The configuration parameters that the WAB-gNB should broadcast, e.g., the TAC(s), the cell ID(s), the RANAC(s).

A WAB-node may be provisioned with the parameters pertinent to different potential locations of the WAB-node.

Alternatively, the OAM can provision configuration parameters to the WAB-node based on the location of the node.

Another requirement stemming from WAB-node mobility is that the continuity of OAM connectivity needs to be ensured as the WAB-node moves.

#### 4.3.x.1 IP address allocation for WAB-node

A WAB-MT obtains IP address(es) for the PDU sessions in the same maneer as a legacy UE,

The WAB-gNB uses the IP address(es) of the WAB-MT’s PDU session for NG and Xn. The WAB-gNB should support security protection of NG and Xn via IPsec as mandated by TS 33.501.

In case the WAB-gNB uses IPsec tunnel mode for NG and/or Xn, the inner IP address of the WAB-gNB may be OAM-configured.

It is possible to transport NG or Xn over other types of tunnel protocols on top of the WAB-MT’s PDU session(s), e.g., such as L2TP. In this case, the WAB-gNB uses different IP address(es) from WAB-MT. Since the support of these tunnel protocols are not mandatory for NG and/or Xn, such tunnel protocols are out-of-scope of this study.

#### 4.3.x.2 TAC/RANAC (re-)configuration for WAB-gNB’s cell

The TAC/RANAC of WAB-gNB’s cell is configured by the OAM, and it can be reconfigured by the OAM during the mobility of WAB-node. The TAC/RANAC of the WAB-gNB’s cell may be same as or different than the TAC/RANAC of the co-located WAB-MT’s serving cell. The TAC/RANAC broadcasted by the WAB-gNB’s cell can be changed in order to reflect the WAB-node’s physical location.

### 4.3.y Resource multiplexing

For in-band operation of WAB-node’s access link and backhaul link, mechanism may be needed to coordinate resource allocation for access links and backhaul link. For this purpose, resource multiplexing mechanism introduced for IAB can be considered as the starting point. To achieve resource multiplexing between access link and backhaul link, the BH gNB may have to be aware of the co-location of a WAB-MT and WAB-gNB.

-------------------------------------------End of changes-------------------------------------------