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 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 configuration parameters of the WAB-node will be location-dependent and may need to be updated as the node moves.

The location-dependent WAB configuration parameters include, e.g.:

* The parameters needed for the WAB-node to connect to new core network nodes (e.g., AMF) and to select a new core network.
* The parameters that enable the RAN node to connect to and communicate with the OAM system.
* IP addresses used for backhauling the traffic to and from the WAB-gNB.
* The configuration parameters that are necessary for the WAB-node to serve UEs in its new area/location, e.g., the TAC(s), the cell ID(s), the PLMN ID(s) that the WAB-gNB should broadcast.
* In case the WAB-node is roaming to another PLMN, the parameters needed for the WAB-node to select the new PLMN and the parameters pertaining to the new PLMN.

A WAB-node can be pre-configured with the parameters pertinent to different potential locations of the WAB-node.

Alternatively, the OAM can provide 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 node moves. As the node moves, it may traverse areas of different OAM systems, and, from time to time, it needs to establish a connection towards the local OAM. In that respect, the node should be provisioned with the “contact details” of the local OAM (e.g., OAM system IP address, FQDN etc.). Hence, a WAB-node can be provided with the information enabling it to connect to different OAM systems at different locations.

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

A WAB-MT may obtain IP address(es) as a normal UE. The WAB-MT may deliver the allocated IP address(es) to the co-located WAB-gNB, which can be used by the WAB-gNB for traffic exchange via the backhaul.

Alternatively, the WgNB may obtain dedicated IP address(es) from the operator’s OAM. In this case, separate IP addresses are used by the WAB-gNB and co-located WAB-MT. A tunnel (e.g., based on IPsec or L2TP) could be established to transfer the WAB traffic by implementation. If a tunnel is established, a gateway may be deployed to terminate the tunnel.

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

Resource multiplexing for WAB node can be supported in case the access and the backhaul of the WAB-node are deployed in-band. Resource multiplexing mechanism for WAB node considers the R16/17 IAB resource multiplexing mechanism as baseline. To achieve the resource mltiplexing, the BH gNB needs to be aware of the co-location of a WAB-MT and WAB-gNB.

End of Change