3GPP TSG-RAN WG3 Meeting #122 R3-237839

**Chicago, US, 13-17 Nov, 2023**

Agenda Item: 13.2

Source: Samsung

Title: (TP for NR\_mobile\_IAB BL CR to TS 38.423) Support IAB-node mobility

Document for: Discussion

# 1 Introduction

This TP is to reflect the agreements in RAN3 122 meeting as below:

**Turn the following WA into agreement: “Use the BAP address as the identifier for the MT in the initial TMM message sent by the DU’s CU to the MT’s CU.”**

**Remove Editor’s Note in BL CR to TS 38.473 and TS 38.423 related to this WA.**

# 2 (TP for NR\_mobile\_IAB BL CR to TS 38.423 Support IAB-node mobility)

<<<<<<<<<<<<<<<<<<<< First Change >>>>>>>>>>>>>>>>>>>>

### 8.5.2 IAB Transport Migration Management

#### 8.5.2.1 General

The purpose of the IAB Transport Migration Management procedure is to exchange information between the F1-terminating IAB-donor and the non-F1-terminating IAB-donor of a boundary IAB-node, for the purpose of managing the migration of the boundary and descendant IAB-node traffic between the topologies managed by the two IAB-donors.

The procedure is applicable to inter-donor partial migration, inter-donor RLF recovery and inter-donor topology redundancy cases. The procedure is initiated by the F1-terminating IAB-donor of the boundary IAB-node. The procedure can be used to set up, modify and release (e.g., for the purpose of revoking) the resources under the non-F1-terminating IAB-donor used for serving the offloaded traffic.

The procedure uses UE-associated signalling.

#### 8.5.2.2 Successful Operation



Figure 8.5.2.2-1: IAB Transport Migration Management triggered by the F1-terminating IAB-donor, successful operation

The F1-terminating IAB-donor initiates the procedure by sending the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message to the non-F1-terminating IAB-donor.

The non-F1-terminating IAB-donor may respond with the IAB TRANSPORT MIGRATION MANAGEMENT RESPONSE message by indicating:

- Traffic accepted for offloading, within the *Traffic Added List* IE;

- Already offloaded traffic accepted for modification, within the *Traffic Modified List* IE;

- Traffic not accepted for offloading, within the *Traffic Not Added List* IE;

- Already offloaded traffic not accepted for modification within the *Traffic Not Modified List* IE.

If the *Traffic To Be Released Information* IE is contained in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message, the non-F1-terminating IAB-donor should release all offloaded traffic if the *All Traffic Indication* IE in the *Traffic to Be Released Information* IE is set to "true", or release only the offloaded traffic indicated by the *Traffic to Be Released Item* IE in the *Traffic to Be Released Information* IE.

If the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message contains the *Traffic to Be Released Information* IE, the non-F1-terminating IAB-donor shall include the *Traffic Released List* IE in the IAB TRANSPORT MIGRATION MANAGEMENT RESPONSE message.

If the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message contains the *IAB IPv4 Addresses Requested* IE or the *IAB IPv6 Request Type* IE in the *IAB TNL Address Request* IE, the non-F1-terminating IAB-donor shall, if supported, provide the allocated TNL address via the *IAB TNL Address Response* IE in the IAB TRANSPORT MIGRATION MANAGEMENT RESPONSE message. If the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message contains the *IAB TNL Address To Remove List* IE in the *IAB TNL Address Request* IE, the non-F1-terminating IAB-donor shall consider that the TNL address(es) are no longer used by the F1-terminating IAB-donor.

If the *IAB TNL Address Exception* IE is contained in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message, the non-F1-terminating IAB-donor shall, if supported, configure the related IAB-donor-DU to enable traffic re-routing over the inter-IAB-donor-DU tunnel.

If the *IAB* *QoS Mapping Information* IE is contained in the IAB TRANSPORT MIGRATION MANAGEMENT RESPONSE message, the F1-terminating IAB-donor, shall, if supported, use it to set DSCP and/or IPv6 flow label fields for the downlink IP packets of the offloaded traffic.

If the *Mobile* *IAB-MT BAP Address* IE is contained in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message and this is the first UE-associated signaling for the IAB-MT identified by the *Mobile* *IAB-MT BAP Address* IE, the non-F1-terminating IAB-donor, shall, if supported, ignore the *Non-F1-Terminating IAB-donor UE XnAP ID* IE and allocate an XnAP UE ID for the mobile IAB-MT to be used in the IAB TRANSPORT MIGRATION MANAGEMENT RESPONSE message and subsequent procedure(s) for this mobile IAB-MT.

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>>