**3GPP TSG-RAN WG3 #119bis-e R3-2xxxxx**

**Online 17th – 26th Apr 2023**

**Title: [draft] Reply LS on Mapping of F1-C IP addresses in the IAB inter-CU topology adaptation and backhaul RLF recovery procedures**

**Response to:**

**Release: Rel-17**

**Work Item: TEI17**

**Source: ZTE [to be: RAN3]**

**To: SA3**

**Cc: RAN2**

**Contact Person: Ying Huang**

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**Send any reply LS to: 3GPP Liaisons Coordinator, mailto:3GPPLiaison@etsi.org**

**Attachments:**

# 1 Overall description

RAN3 thanks SA3 for their LS on Mapping of F1-C IP addresses in the IAB inter-CU topology adaptation and backhaul RLF recovery procedures. And RAN3 provides the following feedback on the issue raised in the LS:

**SA3 Question:** SA3 is currently trying to specify the security handling of IAB inter-CU topology adaptation and backhaul RLF recovery procedures.

In this work, SA3 would need more information for defining one aspect in a way sympathetic to the current flows in TS 38.401, when using dynamic PSK. SA3 believe that the Source/Initial Donor IAB-node needs to know the mapping between the old IP address of the F1-C interface and the new IP address. This mapping is needed to identify the security credentials that will be used to re-establish (using IKE) the IPsec connection used to protect the FI-C interface. In particular this needs to be done for IPsec transport mode and also when there are one or more old/new IP addresses.

SA3 requests RAN3 to provide a suitable method for Source/Initial Donor-IAB node to know the mapping between these IP addresses in order for SA3 to progress with its security work.

**RAN3 feedback:** RAN3 understands the issue raised by SA3 only applies when dynamic PSK-based authentication is used for F1, and the support of dynamic PSK is optional. And RAN3 has not discussed whether to support dynamic PSK-based authentication in R17 IAB inter-CU topology adaptation and backhaul RLF recovery procedures. After some initial discussion, RAN3 observes that stage 2 and stage 3 NBC changes are required to support dynamic PSK in R17 IAB inter-CU topology adaptation and backhaul RLF recovery procedures. RAN3 respectfully ask SA3 whether dynamic PSK-based authentication needs to be supported in R17 IAB inter-CU topology adaptation and backhaul RLF recovery procedures.

# 2 Actions

**To SA3 group.**

**ACTION:** RAN3 respectfully ask SA3 whether dynamic PSK-based authentication needs to be supported in R17 IAB inter-CU topology adaptation and backhaul RLF recovery procedures.

# 3. Date of Next RAN3 Meetings:

RAN3#120 22 th – 26 th May, 2023 Incheon, Korea

RAN3#121 21th – 25th August, 2023 Toulouse, France