**3GPP TSG-RAN WG3 Meeting #111-e R3-211223**

**E-meeting, 25 Jan – 5 Feb 2021**

**Title: [draft]** LS on using MOBIKE in Integrated Access and Backhaul system

**Response to:**

**Release:** Rel-17

**Work Item:** NR\_IAB\_enh-Core

**Source:** Nokia [will be RAN3]

**To:** SA3

**Cc:** -

**Contact Person:**

**Name:** Steven Xu

**E-mail Address:** Steven.1.xu@nokia-sbell.com

1. **Overall Description:**

During the discussion on Integrated Access and Backhaul Enhancements for NR WI, RAN3 agreed the Working Assumption that RFC4555 IKEv2 Mobility and Multihoming Protocol (MOBIKE) can be used to reduce the service interruption during Intra-Donor-CU Inter-Donor-DU topology adaptation.

* When IPsec tunnel mode is used to protect the F1 traffic, the IAB-DU’s outer IP address is anchored in the Donor-DU. The IAB-DU’s inner IP address is used for the SCTP and F1 interface with IAB Donor CU.
* For the migrating IAB node migrating to a target cell under target Donor-DU, the IAB node will be assigned with a new outer IP address anchored in target IAB Donor-DU.
* In Rel-16 topology adaptation, the IAB node will get a new inner IP address, and will use the new inner IP address to establish the SCTP association with IAB Donor.
* If using MOBIKE, the IAB node can reuse the previous inner IP address, thus the previously established SCTP association can be reused after topology adaptation. And the IAB node can initiate MOBILE procedure to update the outer IP address. The service interruption during the topology adaptation can be reduced, e.g. avoid the establishment new SCTP association.

RAN3 would like to ask SA3 to provide feedback on using MOBIKE in Integrated Access and Backhaul system.

**2. Actions:**

**To SA3:**

**ACTION:** RAN3 respectfully ask SA3 to provide feedback on using MOBIKE in Integrated Access and Backhaul system.

**3. Date of Next TSG-RAN3 Meetings:**

TSG-RAN3 Meeting #112-e 17th – 28th May 2021

TSG-RAN3 Meeting #113-e 23th – 27th Aug 2021