3GPP TSG-RAN WG3 Meeting #110-e                                                          R3-20xxxx

2-12 November 2020

**Title:** LS on inter-donor topology redundancy

**Response to:**

**Release:** Rel-17

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

**Source:** Samsung

**To:** RAN1

**Cc:** RAN2

**Contact Person:**

#### Name: Weiwei Wang

E-mail Address: [ww1016.wang@samsung.com](mailto:ww1016.wang@samsung.com)

1. **Overall Description:**

RAN3 discussed the inter-donor topology redundancy for load balancing, and agreed to support the following two scenarios (as shown in the following figure) with the principle that an IAB-DU only has F1 interface with one donor-CU:

* **Scenario 1: the IAB is multi-connected with 2 Donors.**
* **Scenario 2: the IAB’s parent/ancestor node is multi-connected with 2 Donors.**



In both scenarios, the boundary IAB node, i.e., IAB3 in the figure, is simultaneously connected to the two parent nodes (i.e., IAB1 and IAB2) belonging to two different donors. Due to the half-duplex constraints, the radio resource of the IAB-DU at the boundary IAB node is constrained by the resource of the collocated IAB-MT. During the discussion in RAN3, some companies think the coordination between two donors (i.e., donor1 and donor2) may be needed to configure the radio resource of IAB-DU at the boundary IAB node; while some companies have concerns on its feasibility, which may be the showstopper to support the above two scenarios. Since the radio resource coordination is in RAN1 scope, RAN3 would like to get RAN1’s advice on the following question:

* Is there any showstopper to support the above two scenarios via the resource coordination between two donors?

## 2. Actions:

**To RAN2:**

**ACTION:** RAN3 respectfully asks RAN1 to take the above into account and to provide answer to the above question.

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

TSG-RAN3 Meeting #111-e 25th. Jan - 5th Feb. 2021