3GPP TSG-RAN WG3 Meeting #112-e R3-212946

17-27 May 2021, E-meeting

**Title:** [Draft] LS to RAN2 on reduction of service interruption during intra-donor IAB-node migration

**Response to:**

**Release:** Rel-17

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

**Source:** RAN3

**To:** RAN2

**Cc:**

**Contact person:**

* **Name: Milap Majmundar**
* **E-mail Address: milap.majmundar@att.com**

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

# 1 Overall description

RAN3 is currently evaluating the following two solutions for reduction of service interruption during INTRA-donor IAB-node migration. In both solutions, the transfer of RRCReconfiguration for a descendent IAB node occurs over the source path. The two solutions have the goal to delay the descendent node’s execution of RRCReconfiguration until the target path has become available, but not later.

Solution 1:

The RRCReconfiguration message for a descendent node IAB-MT is withheld by this descendant node’s parent IAB-DU, and it is released only when a condition is satisfied. The indication of buffering and conditional release may be included by the IAB-donor-CU together with the RRCReconfigurationmessage. The migrating IAB-node may release the RRCReconfiguration upon successful migration; any lower tier node may release the buffered RRCReconfiguration upon reception of the RRCReconfiguration released by its parent node. This creates a sequential release and execution of RRCReconfigurations downstream.

While exact details of Solution 1 are still FFS, an example procedure is provided in Figure 1.



Figure 1. Example procedure for Solution 1 (R3-211740)

Solution 2:

The RRCReconfiguration message for the descendant-node IAB-MT is buffered by the descendent-node’s IAB-MT itself, and it is executed only when a L2 indication is received from the parent IAB-DU. The indication of buffering and conditional execution may be included in theRRCReconfiguration. The migrating IAB-node may send the L2 indication upon successful migration; any lower tier node may propagate the L2 indication upon reception of such indication from the parent node. This creates a sequential propagation of L2 indications and execution of RRCReconfigurations downstream.

While exact details of Solution 2 are still FFS, an example procedure is provided in Figure 2.



Figure 2. Example procedure for Solution 2 (R3-211740)

RAN2 is requested to provide feedback regarding the following question.

**Q1: Please provide feedback regarding issues and feasibility of Solutions 1 and 2.**

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# 2 Actions

**To: RAN2**

**ACTION: RAN3 kindly asks RAN2 to provide feedback on Solutions 1 and 2.**

# 3 Dates of next TSG RAN3 meetings

RAN3#113e Aug. 16~27, 2021 online

RAN3#114e Nov. 1~12, 2021 online