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**
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**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 transfer of RRCReconfiguration for descendent IAB node over source path for reduction of service interruption during intra-donor IAB-node migration.

Solution 1:

The RRCReconfiguration message for the child IAB-MT is buffered in the parent IAB-DU, and it is sent only when a pre-requisite step is satisfied/performed. The IAB-donor-CU may indicate to the parent IAB-DU to buffer the RRCReconfiguration destined for its child IAB-MT. The buffered RRCReconfiguration may be released by the parent IAB-DU upon satisfaction of a condition. For example, in the case of the migrating IAB-node the RRCReconfiguration may be released upon successful IAB-node migration; and in the case of a descendent IAB-node the RRCReconfiguration buffered at the IAB-DU may be release upon reception of RRCReconfiguration by corresponding IAB-MT from its parent IAB-DU.

While exact details of Solution 1 are still FFS, an example procedure for Solution 1 is provided in Figure 1 below to help RAN2 better understand the general solution. Note that this is subject to change.



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

Solution 2:

The RRCReconfiguration message for the child IAB-MT is buffered in the child IAB-MT, and it is executed only when a pre-requisite step is satisfied/performed. The IAB-donor-CU may indicate to the child IAB-MT to buffer its own RRCReconfiguration destined and delay its execution. The buffered RRCReconfiguration may be executed by the child IAB-MT upon satisfaction of a condition. For example, in the case of the migrating IAB-node the migrating IAB-node may send an indication to its child IAB-MT about successful IAB-node migration; and a descendent IAB-node may send an indication to its child IAB-MT upon reception of such indication from its parent IAB-node.

While exact details of Solution 2 are still FFS, an example procedure for Solution 2 is provided in Figure 2 below to help RAN2 better understand the general solution. Note that this is subject to change.



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