**3GPP TSG-RAN WG3 Meeting #119-bis-eR3-231901**

**Online, April 17th – 26th 2023**

Agenda Item: 13.2

Source: Ericsson (moderator)

Title: CB # IAB2\_IABMobility - Summary of email discussion

Document for: Approval

# Introduction

The deadline for providing replies to Phase 1 is **Wednesday, April 19th at 15.59 UTC.**

**Relevant papers:**

**[CATT1275]** Enhancements for mobility of IAB-node together with Ues (CATT)

**[QC1309]** Topology adaptation for mobile IAB (Qualcomm Inc.)

**[Fuj1329]** Discussion on IAB-node DU migration (Fujitsu)

**[Fuj1330]** Discussion on IAB-node consecutive partial migrations (Fujitsu)

**[ZTE1357]** Discussion on inter-donor migration in mobile IAB scenario (ZTE)

**[Len1440]** Discussion on mobile IAB-node inter-donor topology adaptation (Lenovo)

**[Len1441]** IAB-MT and IAB-DU migrate to different IAB-donors (Lenovo)

**[Nok1470]** Discussion on Support IAB-node mobility (Nokia, Nokia Shanghai Bell)

**[Nok1471]** Support for mobile IAB (Nokia, Nokia Shanghai Bell)

**[Can1479]** Discussion on MT and DU Migrations of Mobile IAB-node (CANON Research Centre France)

**[Hua1483]** (TP for NR\_mobile\_IAB BL CR for TS 38.401/38.413/38.473): Support of mobility for mobile IAB (Huawei)

**[Xmi1524]** Discussion on IAB-node mobility (Xiaomi)

**[Eri1535]** Migration Procedure for Mobile IAB-Nodes (Ericsson)

**[Sam1717]** Discussion on DU migration (Samsung)

**[Sam1718]** Discussion on multiple partial migration (Samsung)

# For the Chairman notes

**TBW in the final version, check the current proposals below**

# Discussion

## mIAB-DU inter-donor migration

### Target selection for mIAB-DU migration

An RAN3#119 agreement states:

**Target donor CU selection for mIAB-DU migration and triggering conditions for F1 setup can be up to source CU implementation (unless it is justified that this is not possible) or based on OAM configuration at the source CU.**

Papers **[Hua1483]** and **[ZTE1357]** propose various criteria for choosing the target CU for mIAB-DU migration, whereas the above agreement states that target selection is up to source CU implementation. If the intention is to make the agreement somewhat more concrete, RAN3 could discuss the below potential proposal.

**PP: The mIAB-DU’s source CU choses the target CU for mIAB-DU migration from a pre-/OAM-configured list of candidate target CUs in the area where the mIAB-node is located.**

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| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree** | The current agreement is quite OK, but maybe we do need a bit more details for the stage-2 text. |
| CATT | Agree | And we believe no impact to spec is expected on the target CU selection for DU migration except pre-/OAM configuring the source CU about the candidate target CUs with respect to the location of mIAB-node. |
| Huawei | Agree with rewording | For the DU migration, propose a little revision as:  **Up to implementation, the mIAB-DU’s source CU choses the target CU for mIAB-DU migration from a pre-/OAM-configured list of candidate target CUs, which has Xn connectivity with the mIAB-DU’s source CU and the mIAB-MT’s CU.** |
| Qualcomm | **Disagree** | The PP is in violation with the prior agreement. The prior agreement leaves it up to implementation on how the source CU selects the target CU. The PP defines a specific approach, which would NOT leave it up to implementation. There is no need for the source CU to have a candidate list of target CUs, and there is reason to confine the migration to a target CU in the area where the mIAB-node is located. What does that even mean!  We prefer to just keep the prior agreement. Nothing else is needed.  Also, Hua1483 and ZTE1357 discuss information the source CU could use for the selection of the target CU. Yes, the source CU can use such info, but it doesn’t have to. The selection is up to the source CU implementation (including OAM configuration) as agreed. |
| Lenovo |  | Prefer to only have the agreements above and don’t need to make further clarification for the implementation solution. |
| Xiaomi | Agree | Similar view as E///, we can have a stage2 text, but we prefer the original wording from the moderator, we think no need to add “conditions” as proposed by HW, anyway, it’s up to implementation, OAM can know the whole story.  Regarding the concerns from QC, we think the only difference from the previous agreement is “list of candidate target CUs in the area” added in the new proposal, which seems not a specific approach to us, there must be some candidate when taking about selection. |
| Fujitsu | Agree | We are also OK to stick to the current agreement. |
| ZTE | Disagree | We are not sure about the meaning of “in the area where the mIAB-node is located” in the PP. And we prefer to keep the prior agreement “**Target donor CU selection for mIAB-DU migration and triggering conditions for F1 setup can be up to source CU implementation (unless it is justified that this is not possible) or based on OAM configuration at the source CU.**”.  There could be a list of candidate target CUs pre-/OAM-configured in the mIAB-DU’s source CU, and there could be no such a list. It’s all up to source CU implementation or OAM configuration at source CU. |
| Nokia | disagree | We prefer original agreement, since previous agreement is clear. The new text, e.g. “**in the area**” cause confusion. |
| Samsung | Agree |  |

**Summary:** No proposal.

### Informing the mIAB-DU about the target CU for mIAB-DU migration

Another RAN3#119 agreement states:

**When triggering the F1 Setup procedure on the mIAB-node, the source logical mIAB-DU’s CU to include the information of target logical mIAB-DU’s CU (e.g. IP address, gNB-ID).**

Most companies propose that the source CU indicates to the mIAB-DU the gNB-ID of target CU. Some companies argue that it may be beneficial/needed to include the IP address(es) of the target CU as well.

**PP-1: When triggering the F1 setup from the mIAB node to the target CU for mIAB-DU migration, the source CU indicates to the mIAB-DU:**

* **The gNB-ID of mIAB-DU’s target CU.**
* **Optionally, the IP address(es) of mIAB-DU’s target CU.**

Based on the contributions, if the source CU does not provide the target CU’s IP address, the mIAB node should either obtain it from the OAM, or it can be pre-configured with the mapping between gNB-IDs and IP addresses of candidate target CUs for mIAB-DU migration.

**PP-2: The mIAB-node may obtain the IP address of target CU for mIAB-DU migration:**

* **From the OAM, after indicating the target gNB-ID to the OAM.**
* **Based on the target gNB-ID selected by the source CU, and a preconfigured mapping between candidate target CU gNB-IDs and their IP addresses.**

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| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree to both** | The F1 setup requires that mIAB-node knows the IP address of the target CU. If the source CU does not provide the IP address, we need to clarify how the IP address is obtained. |
| CATT | Agree to PP-2 | For PP-1, we think source CU only needs to indicate the gNB-ID of mIAB-DU’s CU because the source CU is not expected being configured with the details information about target CUs for DU migration. |
| Huawei | PP-1: agree  PP-2: not necessary | PP-2 are implementation issues, no need to have such proposal. |
| Qualcomm | Agree to PP-1  Propose rewording for PP-2 | PP-2 goes too much into details of how OAM-based configuration or pre-configuration should work. This is out of scope. We should simply state:  **PP2’: The mIAB-node may obtain the IP address of target CU for mIAB-DU migration via OAM or pre-configuration.** |
| Lenovo |  | Maybe **another option** can be considered: **The mobile IAB-node obtains the IP address of target CU from the source CU directly.**  In this option, source CU chooses the target CU for IAB-DU migration, and inform the IP address of the target CU to the mobile IAB node. And the gNB-ID is not necessary in the triggering indication from source CU. |
| Xiaomi | Yes to both | Agree with QC’’s rewording on PP2 |
| Fujitsu | See comment | We think it is better that the source CU indicates to the mIAB-DU about the gNB ID of mIAB-DU’s target CU **and** the IP address of the mIAB-DU’s target CU as well. It is simpler since no solution in PP-2 is needed. |
| ZTE | PP-1: agree  PP-2: agree with QC’s rewording | Agree with QC’’s rewording on PP2, no need to agree on the details for OAM or pre-configuration based solution. |
| Nokia | Agree with comments | For PP-1, only gNB-ID is needed. The IP address of target CU is not enough, since the IAB also need to the SeGW IP address in case target CU uses a different SeGW. Then IAB-DU also need to be configured with other DU parameters to initiate F1 Setup. So at the end, it may require more information to be provided. But the main point is the gNB-ID of target CU, then OAM can configure other parameters (e.g. IP address of target CU, IP address of SeGW, etc).  For PP-2, in the 2nd bullet, it is also an OAM configured mapping. The pre-configuration is also OAM configuration. So both bullets can be summarized that IAB know the IP address of target CU based on OAM configuration, i.e. change PP-2 to  **PP-2: The mIAB-node may obtain the IP address of target CU for mIAB-DU migration based on the OAM configuration.** |
| Samsung | PP-1: agree  PP-2: not necessary | For PP-2, agree with Huawei. |

**Summary:**

**Proposal 1-1: When triggering the F1 setup from the mIAB node to the target CU for mIAB-DU migration, the source CU can indicate to the mIAB-DU:**

* **The gNB-ID of mIAB-DU’s target CU.**
* **Optionally, the IP address(es) of mIAB-DU’s target CU.**

**Proposal 1-2: WA: The mIAB-node may obtain the IP address of target CU for mIAB-DU migration and the IP address of its SeGW via OAM or pre-configuration.**

**Moderator:** Obtaining the “contact details” of the target CU is a pre-requisite for F1 setup and it should be captured. P1-1 explains the CU-based acquisition, and P1-2 captures the alternative approach. As for P 1-2, pre-configuration may not necessarily be equivalent to OAM configuration (it may, e.g., refer to manual configuration). Also included the SeGW IP address in P1-2, as per Nokia’s comment.

### Informing mIAB-DU’s target CU about mIAB-MT’s CU

To initiate the IAB Transport Migration Management procedure towards the mIAB-MT’s CU, the target CU for mIAB-DU migration needs to know the gNB-ID of the mIAB-MT’s CU and the ID of the mIAB-MT at this CU. The two most popular options are:

* **Option A:** Via XnAP signalling from the mIAB-DU’s source CU.
* **Option B:** Via F1AP signalling from the target logical mIAB-DU.

**Q: How does the target CU for mIAB-DU migration obtain the gNB-ID of the mIAB-MT’s CU and the ID of the mIAB-MT at this CU - by means of Option A or Option B?**

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| **Company** | **Answer** | **Comment** |
| **Ericsson** | **See comment** | Option B is indeed independent of XnAP connectivity between the source and target CU, which makes it attractive. However, this information alone is insufficient for executing the F1 setup between the target logical mIAB-DU and the target CU. Namely, for the mIAB-MT’s donor DU to properly execute IP-to-BAP mapping of the F1 SETUP RESPONSE sent from the target CU to the target logical mIAB-DU, the mIAB-DU’s target CU needs to know how to properly set the IP header of the packet carrying the F1 SETUP RESPONSE. We should discuss whether the source CU or some other node should provide this information to the target CU.  **Conclusion**: only after we have determined the full set of info that needs to be provided to the target CU, can we decide how to provide it. |
| CATT | Option A | Agree with Ericsson, before the F1 setup procedure towards the mIAB-DU’s target CU, the mIAB-DU’s target CU should be informed with the QoS mapping info for IP layer (i.e., DSCP and flow label) to deliver the F1 SETUP RESPONSE message. To do that, maybe only Option A is feasible. |
| Huawei | Option A | There are some problems for option B:   1. IAB node may not know the MT’s CU ID (gNB ID length is optionally broadcasted), and its own XnAP UE ID (which is mandatory for the IAB transport migration management procedure). 2. Moreover, as indicated in the Ericsson’s comments, the QoS of DL IP packets before F1 setup (e.g. SCTP handshake messages) may not be guaranteed, since the QoS information includes DSCP and/or flow label is not able to be provided to the target F1 terminating CU, before the target F1 terminating CU know the MT’s CU ID from the F1 setup request message.   Since the target CU’s ID can be preconfigured or provided by OAM, it is suitable to configure the target CU which has Xn interface with the source donor CU, the Xn connection is not a problem.  So, we think the option A is better based on the above understanding. |
| Qualcomm | Option B | We disagree with Ericsson and CATT on QoS info exchange for F1-C. In Rel-17 partial migration, the IAB-DU establishes F1-C based on default routing and DSCP/flow-label for the IP address prefix. QoS exchange is initiated after F1-C establishment. The same should be applied here.  **Option B** aligns with topology discovery in Rel-6/17 IAB, where the MT obtains an identifier (BAP address) via RRC, and the DU reflects it back in F1 Setup Request.  **Option A** becomes very painful if the target DU’s CU is different form the MT’s CU since the two CUs cannot directly communicate via UA signaling, and they cannot refer to a common DU ID in a NUA message. The only alternative is to exchange this signaling via the MT’s CU, which becomes rather cumbersome. |
| Lenovo | Opt. B | For Opt. A, it may need to further introduce a new procedure between source CU and target CU. Especially in case there is no Xn between source CU and target CU, it’s more complicated.  And Opt. B, gNB-ID of the mIAB-MT’s CU and the ID of the mIAB-MT can be carried by F1 setup request message directly. |
| Xiaomi | Option A | We agree with HW that the IAB-node is not aware of XnAP ID in option B, which seems additional information exchange is needed. |
| Fujitsu | See comment | gNB ID of the mIAB-MT’s CU can be included in F1AP signalling (enhanced F1 SETUP REQUEST).  The ID of the mIAB-MT at the mIAB-MT’s CU can be carried in XnAP signalling from the mIAB-DU’s source CU. |
| ZTE | Option B | In option A, new additional signaling needs to be defined to transfer these info from DU’s source donor to DU’s target donor. In option B, BAP address could be used for MT ID as already included in the F1 setup request message. |
| Nokia |  | Agree with E/// |
| Samsung | Option A | Share the similar view with Ericsson and CATT. We need to confirm what information is needed for the mIAB-DU’s target CU before mIAB-DU’s target CU sends F1 setup response message to mIAB, and how mIAB-DU’s target CU can get these information. Compare two options, option A is more feasible. |

**Summary:** Assuming that the explanation provided by QC reply in section 3.1.4 is correct, it seems that Option B is not a showstopper for executing F1 Setup procedure towards the mIAB-DU’s target CU. However, **the original intention of this discussion is to enable TMM triggering from the mIAB-DU’s target CU**, for which the mIAB-DU’s target CU needs to know the gNB-ID of the mIAB-MT’s CU and the ID of the mIAB-MT at this CU.

**Proposal 2-1: Discuss whether the gNB-ID of the mIAB-MT’s CU and the ID of the mIAB-MT at this CU is provided to mIAB-DU’s target CU via:**

* **Option A: XnAP signalling from the mIAB-DU’s source CU.**
* **Option B: F1AP signalling from the target logical mIAB-DU.**

**Proposal 2-2: For Option B, discuss whether and how the mIAB-DU can obtain the gNB-ID of the mIAB-MT’s CU and the ID of the mIAB-MT at this CU.**

### Additional information needed at the mIAB-DU’s target CU

As explained above, RAN3 needs to discuss two essential issues:

* **Enabling F1 setup towards target CU:** Before the target logical mIAB-DU initiates the F1 setup towards the target CU, the target CU needs to learn how to properly set the IP header fields of the packet carrying the TNL association-related messages and the F1 SETUP RESPONSE message.
* **The content of IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message from target CU to the mIAB-MT’s CU:** Target CU needs to know how to populate this message. In Moderator’s understanding, the target CU needs to know the traffic profile pertaining to the source logical mIAB-DU.

**PP: The target CU for mIAB-DU migration needs to be notified about the following:**

* **Traffic profile of the source logical mIAB-DU’s traffic.**
* **BH information of the source logical mIAB-DU’s traffic.**

This information can be provided to the target CU according to the following options:

* **Option A:** via XnAP signalling from the mIAB-DU’s source CU.
* **Option B:** via F1AP signalling from the mIAB-DU, which obtains this information from its source CU.

**Q: How should the mIAB-DU’s target CU receive the traffic profile and BH information of the source logical mIAB-DU’s traffic, according to Option A or Option B?**

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| **Company** | **Answer** | **Comment** |
| **Ericsson** | **PP4: agree**  **Q4: A** | **PP4:** it is reasonable to assume that the traffic profile of the (source logical) mIAB-DU before the first UE HO is equivalent to the traffic profile of the (target logical) mIAB-DU after the last UE HO.  **Q4:** We are not sure how Option B would work – the F1 SETUP RESPONSE cannot be delivered to the target logical mIAB-DU before the IAB Transport Migration Management procedure between the target CU and the mIAB-MT’s CU has been executed successfully. This means the mIAB-DU’s source CU should indicate the traffic profile and BH info to the target CU. |
| CATT | Agree with the PP.  Option A. | Agree with Ericsson, we assume traffic profile as well as the BH info of the traffic need to be informed to the target logical DU’s CU. Because traffic profile and the backhaul link are not expected to change during the DU migration, the mIAB-Du’s target CU needs that information to see whether change of traffic profile or BH info occurs (e.g., some UEs are not handovered successfully) after the last UE HO and initiate the transport migration modification procedure to the mIAB-MT’s CU if that occurs.  For the detail BH info to be indicated to the mIAB-DU’s target CU, we think the BH info includes the BH info in non-F1-terminating topology (i.e., topology of the mIAB-MT’s CU) as well as the DL TNL addresses on the source logical mIAB-DU. |
| Huawei | See comment | We think the baseline procedure, should be that the target CU know the QoS profile for each UE’s traffic from the HO request when UE perform HO from the source CU, which is same as legacy UE HO. Regarding to the BH information in non-F1 terminating topology, the target CU can know that from the IAB TMM procedure, which is same as Rel-17. And we suggest the following proposal revised based on the PP4:  Revised PP4:  **As baseline, the target CU for mIAB-DU migration needs to be notified about the following:**   * **Traffic profile of the UE’s traffic, from UE’s HO procedure.** * **BH information for supporting the UE’s traffic, from IAB TMM procedure towards the MT’s CU.** |
| Qualcomm | **Disagree with everything said** | There seems to be a mega misunderstanding.  In Rel-17 partial migration, the DU uses the default routing for all UL packets to set up F1, which includes IKE handshake, SCTP Setup and F1 Setup Request. It as the source IP address, it uses one of the IP addresses (or prefix) allocated to the **mIAB-MT** by the **non-F1-**terminating CU for F1-C traffic.  Further, in Rel-17, the **F1-**terminating CU sends the DL IKE packets, DL SCTP packets and F1 Setup Response packet to the IP address it obtained from the SRC Address field in the corresponding UL IP headers.  Further, in Rel-17, the **non-F1**-terminating donor-DU has a default DL mapping for the F1-C addresses (or prefix) so that it can forward the F1 Setup Response.  **The exact same procedure is used for the F1-C establishment of the second logical DU. Nothing else is needed!**  All traffic profile/QoS exchange happens **after** F1-C establishment via the Xn TMM procedures. |
| Lenovo | See comments | Why does the target CU need to know the traffic profile or the BH information of the source logical IAB-DU’s traffic.  Before the DU migration, all source logical IAB-DU’s traffic is terminated at source CU via the BH link under MT’s CU, and this can be already supported by the legacy IAB TMM procedure between source CU and MT’s CU. After the DU migration, the source link will be released, and the traffic of target logical IAB-DU can be managed by the IAB TMM procedure between target CU and MT’s CU.  The main issue we need to resolve is that how can the F1 setup response massage transport between target CU and target logical IAB-DU. |
| Xiaomi | See comments | We think companies have different views on the flow sequence for inter donor DU migration, we prefer to discuss this after the stage2 flow is clear to us. |
| Fujitsu | See comment | PP4: We agree that the target CU for mIAB-DU migration be notified about the traffic profile of the source logical mIAB-DU’s traffic. The traffic profile can be carried in the UE Context Information in the HO REQUEST. The BH information can be obtained by the TMM procedure between the target CU and the mIAB-MT’s CU.  We agree with Huawei’s revised PP4. |
| ZTE | See comments | 1. For traffic profile   The DU’s target donor can obtain the traffic profile from the existing handover request message for UEs.   1. For BH information   We are not sure why DU’s target donor needs to be notified about the BH information of the source logical mIAB-DU’s traffic. F1-terminating Topology BH Information is included in the TMM request message indeed, which includes DL TNL Address and DL/UL F1 Terminating BH Info. The DU’s target donor could know the new DL TNL Address of mIAB-DU from the mIAB-DU after F1 setup and F1-U tunnel establishment. The DL/UL F1 Terminating BH Info indicates the BH information for DL/UL traffic of a descendant node, they are not needed since mobile IAB node has no child/descendant nodes. |
| Nokia | Disagree | Agree with QC. No difference to Rel-17. |
| Samsung | **PP4: agree**  **Q4: A** | It is helpful for the target logical DU’s CU to know the traffic profile and BH information of the source logical mIAB-DU’s traffic. The target logical DU’s CU can decide whether to accept DU migration based on these information. |

**Summary:** All companies agree that the mIAB-DU’s target CU needs to know the traffic profile information, but there is no consensus wrt how this information can be obtained. Some companies suggest that the traffic profile information is learned from individual UE HOs. The Moderator notices that this may (at least theoretically) imply a TMM procedure execution after every UE handover – when the target CU sees that a UE with a certain set of QoS requirement is about to arrive, the target CU requests adequate backhaul resources from the mIAB-MT’s CU. Frequent TMM execution may be cumbersome. Hence, other alternatives should be explored as well.

**Proposal 3: Discuss whether the target CU for mIAB-DU migration learns the traffic profile of the UE traffic from Handover Preparation procedures for individual UEs, or in a different way (e.g., via an explicit indication of UE traffic profile from the mIAB-DU’s source CU).**

### XnAP ID of the mIAB-MT in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message sent from mIAB-DU’s target CU to the mIAB-MT’s CU

The target CU needs to initiate the IAB Transport Migration Management procedure towards mIAB-MT’s CU.

**PP: The “Non-F1-Terminating IAB-donor UE XnAP ID” in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message sent from mIAB-DU’s target CU to the mIAB-MT’s CU is generated by the mIAB-MT’s CU.**

Furthermore, the following needs to be discussed: what should be the “F1-Terminating IAB-donor UE XnAP ID” in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message sent from mIAB-DU’s target CU to the mIAB-MT’s CU?

There are at least the following options:

* **Option A:** The UE XnAP ID previously “owned” by the mIAB-DU’s source CU.
* **Option B:** The UE XnAP ID generated by the mIAB-DU’s target CU.

**Q: In the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message sent from mIAB-DU’s target CU to the mIAB-MT’s CU, what should be the “F1-Terminating IAB-donor UE XnAP ID”?**

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| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **PP: Agree**  **Q: needs to be further discussed** | **Q: both options have issues:**   * Neither Option A nor Option B are “by the book”, given that the mIAB-MT may have never “visited” either of the two CUs. * During mIAB-DU migration, both the source and the target CU may need to run TMM procedures towards the mIAB-MT’s CU. Assuming A is agreeable, is it formally OK that both source and target CUs use the same set of (“F1-Terminating IAB-donor UE XnAP ID”, “Non-F1-Terminating IAB-donor UE XnAP ID”) to interact with the mIAB-MT’s CU? * Option A, where mIAB-DU’s target CU “inherits” the mIAB-MT’s UE XnAP ID from the mIAB-DU’s source CU may not be feasible, since the UE XnAP ID may be occupied at the present CU. |
| CATT | Agree with the PP.  Prefer Option B for the question. | We don’t see the necessary of sharing the “F1-Terminating UE XnAP ID” between the source and target CUs of mIAB-DU. On the other hand, Option A is not feasible, as Ericsson said, the UE ID may have been occupied on the target CU.  For Option B, although the TMM message is the first message from the target CU to the mIAB-MT’s CU, it targets to a mIAB-node known to the mIAB-MT’s CU. By the **“Non-F1-Terminating IAB-donor UE XnAP ID”** in the TMM message,the mIAB-MT’s CU can recognize the mIAB-node, hence can update the gNB-ID of F1-terminating IAB-donor CU as well as the XnAP UE ID on that CU for this mIAB-node. |
| Huawei | PP: Agree  Q: option B | Based on the agreements: “*In case the target logical mIAB-DU’s CU is different from the mIAB-MT’s CU, the target logical mIAB-DU’s CU needs to be informed about the mIAB-MT’s CU ID and the mIAB-MT ID so that it can initiate the Xn TMM procedures towards mIAB-MT’s CU.*” The target F1 term CU should know the mIAB-MT first, and then generate new XnAP ID for this mIAB-MT, before initiating IAB TMM procedure to the MT’s CU. |
| Qualcomm | PP: Agree  Q: See comment | On Q:  If the F1-terminating CU has already used a UE ID for this MT with the non-F1-terminating CU, it should certainly reuse this UE ID for this MT.  If the F1-terminating CU has not yet used a UE ID for this MT with this non-F1-terminating CU (e.g., because it is the target logical DU’s CU which talks to the MT’s CU for the first time), then it itself should select a new UE ID.  Note: The F1-terminating CU cannot use a UE ID generated by a different CU since this may lead to UE ID collisions, i.e., the F1-terminating CU might have already allocated this UE ID to another UE or MT. |
| Lenovo | PP: Agree  Q: Option B | Option A cannot work because the UE XnAP ID may be already allocated to another UE which may lead to some unexpected inconsistent problem. Therefore, both target CU and MT’s CU need to allocate a new UE XnAP ID for the IAB-MT specific for the Xn interface between target CU and MT’s CU. |
| Xiaomi | PP: agree  Q: option B | Similar view as HW |
| Fujitsu | PP: Agree  Q: Option B | Q: The F1-terminationg IAB-donor UE XnAP ID belongs to the target CU by definition. Otherwise there may be UE XnAP ID collision. |
| ZTE | PP: see comments  Q: Option B | PP: as discussed in 3.1.3, if the ID of MT’s target donor and MT ID are sent to DU’s target donor via F1 from the mIAB-DU, then BAP address allocated by MT’s donor could be used to identify the MT. In this case, it should be discussed how to set the “Non-F1-Terminating IAB-donor UE XnAP ID” in the TMM request message. And it may be not generated by the mIAB-MT’s CU. |
| Nokia | PP: Agree  Q: Option B | IAB-DU’s target CU terminates the “new” F1. So this XnAP TMM Request is sent from the “new” F1-terminating donor (i.e. IAB-DU’s target CU).  For example, CU1 is IAB-MT’s CU. CU2 is for IAB-DU’s source CU terminating source F1. CU3 is for IAB-DU’s target CU terminating target F1. From CU1 perspective, both CU2 and CU3 are F1-termiating donor, i.e. CU2 for source F1, and CU3 of target F1. |
| Samsung | PP: Agree  Q: option B | Share the same view with Huawei. |

**Summary:** It seems that companies prefer Option B. However, it needs to be discussed whether this option violates the XnAP principle of XnAP UE ID allocation. Namely, it should be discussed whether a CU may generate an XnAP UE ID for an mIAB-MT even if it may never have served this mIAB-MT.

**Proposal 4-1: The “Non-F1-Terminating IAB-donor UE XnAP ID” in the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message sent from mIAB-DU’s target CU to the mIAB-MT’s CU is generated by the mIAB-MT’s CU.**

**Proposal 4-2: Discuss whether the mIAB-DU’s CU is allowed to generate an XnAP UE ID for an mIAB-MT even if it has never terminated the RRC connection of the mIAB-MT.**

### Traffic release at source logical mIAB-DU

After mIAB-DU migration, the backhaul resources used for proxying the traffic of the source logical mIAB-DU need to be released at the CU of the mIAB-MT.

**Q: How to handle the release of backhaul resources of the mIAB-MT’s CU used for proxying the traffic of the source logical mIAB-DU?**

* **Option A: The mIAB-DU’s source CU initiates the IAB Transport Migration Management procedure towards the mIAB-MT’s CU and requests the release?**
* **Option B: The CU of mIAB-MT initiates the IAB Transport Migration Modification procedure towards the mIAB-DU’s source CU to notify about the release?**
* **Option C: The mIAB-DU’s target CU initiates the IAB Transport Migration Management procedure towards the mIAB-MT’s CU and requests the modification or release of BH resources (as needed)**

|  |  |  |
| --- | --- | --- |
| **Company** | **Answer** | **Comment** |
| **Ericsson** | **A** | The release should be requested by the mIAB-DU’s source CU – only the mIAB-DU’s source CU knows when the last UE has been handed over from the source logical mIAB-DU to the target logical mIAB-DU. |
| CATT | C | One question is whether release of the BH resources used for transporting the traffic of source logical mIAB-DU is mandatory? In other words, whether the mIAB-MT’s CU should release the BH resources for the traffic of source logical mIAB-DU and set up the BH resources for the same traffic of target logical mIAB-DU, or the mIAB-MT’s CU just modify the BH resources as needed?  In our view, the traffic profile and the backhaul link are not expected to change during the DU migration until the last UE HO. If the traffic profile is changed after UE HO is completed (e.g., due to the target CU of mIAB-DU refuses some UEs’ HO), the target CU of mIAB-DU can initiate the TMM procedure to request modifying or release the BH resources in topology of the mIAB-MT’s CU by indicating the changed traffic profile. Otherwise, it’s not needed to release the BH resources in topology of the mIAB-MT’s CU. |
| Huawei | See comments | Following Rel-17, it should be option A. However, we are not sure the BH resources of the non-F1 terminating topology should be released when IAB-DU’s migration is finished, considering that all the traffics are still need to be backhauled using the same BH links owned by the non-F1 terminating topology, because the MT not perform HO during DU’s migration. So, maybe **these BH resources only need to be released until the MT’s HO is completed**. |
| Qualcomm | A | **This is all Rel-17 procedure.**  When the **F1**-terminating CU migrates its UEs to somewhere else (doesn’t matter where), it needs to ask the **non-F1**-terminating CU to release the corresponding BH resources. This is already supported by the Xn Transport Migration MANAGEMENT Request.  On Option B: The Xn Transport Migration MODIFICATION is **ONLY** initiated by the **non-F1**-terminating CU. This means, Option B is off the table.  Option C doesn’t make any sense. Why should the target CU care what the source CU as arranged with the MT’s CU. |
| Lenovo | A | This is already supported by the R17 IAB TMM procedure. |
| Xiaomi | A |  |
| Fujitsu | A or B | In Rel-17, both F1-terminating and non-F1-terminating donor can initiate the release of the traffic offload (via different IAB TMM procedures). |
| ZTE | See comments | What does the backhaul resources to be released at MT’s CU mean? If it means the backhaul resources between source logical DU and MT’s target donor DU, then we think it doesn’t need to be released after DU migration since the traffic between target logical DU and DU’s target donor needs to be transferred via the same backhaul link. Anyway, the MT’s donor can determine whether any reconfiguration is needed by itself. |
| Nokia | C | The BH may not need to be released, since the current BH allocated for source F1 (or used by IAB-DU’s source CU) can be reused by target F1 (or used by IAB-DU’s target CU) for the same set of UEs. There may be some change during the UE’s HO to target CU, e.g. a specific UE is rejected. Then target CU can initiate the modification if needed. So CATT proposal make sense. |
| Samsung | A | This depends on whether the BH resource for the source donor CU is reused by the target donor CU. So, we suggest to reword option A as:  Option A: The mIAB-DU’s source CU initiates the IAB Transport Migration Management procedure towards the mIAB-MT’s CU and requests the release **(if needed)** |

**Summary:**  Upon mIAB-DU migration, the “TMM association” between the mIAB-DU’s source CU and mIAB-MT’s CU ceases to exists. Hence, the mIAB-DU’s source CU must initiate the IAB Transport Migration Management procedure towards the mIAB-MT’s CU for releasing this “association”. Given that the Option A is most popular and legacy, no proposal is needed.

## Miscellaneous issues

### Capturing mIAB-MT HO and mIAB-DU migration in stage2

**PP: Capture the mIAB-MT HO and mIAB-DU migration as separate procedures in TS 38.401.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree** |  |
| CATT | Agree |  |
| Huawei | Agree |  |
| Qualcomm | Agree |  |
| Lenovo | Agree |  |
| Xiaomi | Agree |  |
| Fujitsu | Agree |  |
| ZTE | Fine |  |
| Nokia | Agree |  |
| Samsung | Agree |  |

**Summary:**

**Proposal 5:** **Capture the mIAB-MT HO and mIAB-DU migration as separate procedures in TS 38.401.**

### Confirming the RAN2 agreements about BH transport

**PP: Confirm the following RAN2 agreements:**

* **For the upstream data handling at the BAP of mobile IAB MT, the F1AP BAP configuration for each logical DU should be configured/controlled by the DU’s respective donor-CU via the corresponding F1AP connection.**
* **For the downstream data handling arriving at the mobile IAB-node, the upper layers (e.g., IP layer) can differentiate the data to different logical DUs based on, e.g., the IP address.**

**Q: Should the IP address in the DL packet used for differentiation be the source IP address or destination IP address?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **PP: Agree**  **Q: perhaps source IP** | Q: It is perhaps more convenient that the differentiation is done based on the source IP address, since, in that case, the addresses so far used only by the source logical mIAB-DU may be, from now on, used by the target logical mIAB-DU as well. |
| CATT | PP: Agree  Q: source IP is simple. | For the question, source IP address is simple way, because the destination TNL addresses can be kept unchanged during DU migration. |
| Huawei | PP: Agree  Q: destination IP address | This is to differentiate the DL traffic to different logical DUs, using destination IP address is a straightforward choice. |
| Qualcomm | PP: See comment  Q: See comment | Q: The IAB-node’s IP layer differentiates DL packets based on the following 5-tuple:   * Source IP address * Destination IP address * Next header protocol type * Transport source port number * Transport destination port number   For IPsec packets, it uses the SPI instead of the port numbers.  This approach is applied by all operating systems I could think off. We do not need to discuss this here. Not that the RAN2 is not very familiar with these upper layer issues. They agreed on “e.g., the IP address”, which is okay due to the term “e.g.”.  We propose rewording of the PP:  **PP: Confirm the ~~following~~ spirit of RAN2 agreements:**   * **For the upstream data handling at the BAP of mobile IAB MT, the F1AP BAP configuration for each logical DU should be configured/controlled by the DU’s respective donor-CU via the corresponding F1AP connection.** * **For the downstream data handling arriving at the mobile IAB-node, the upper layers (e.g., IP layer) can differentiate the data to different logical DUs based on~~, e.g., the IP address~~ upper-layer header information.** |
| Lenovo | PP: Agree  Q: source IP and target IP (prefer) | Both source and target IP address can work. But it’s more logical to use a target address for route a DL traffic. |
| Xiaomi | PP: Agree  Q: agree with QC | Agree with QC’s rewording. |
| Fujitsu | PP: Agree  Q: destination IP address | Q: From implementation point of view, the traffic differentiation will be done in application layer (GTP layer). GTP normally does not check the source IP address. To reduce the implementation complexity, the destination IP address should be used for DL traffic differentiation. A separate IP address is needed for the target logical mIAB-DU. |
| ZTE | PP: agree  Q: prefer source IP address | If source IP address is used for DL packet differentiation, then the same IP address could be used for mIAB node. Otherwise, if target IP address is used for DL packet differentiation, different IP addresses need to be used for mIAB node. That means an additional set of IP addresses need to be allocated by the MT’s donor to the mIAB node. Then it should be discussed how to allocate/handle the second set of IP address for the mIAB node. So we prefer that source IP address is used for DL packet differentiation at the mobile IAB-DU. |
| Nokia | PP: Agree  Q: source IP is workable | QC update is fine.  The receiver may also consider the destination IP address, but this is an implementation issue. |
| Samsung | PP: Agree  Q: destination IP address | Share the same view with Huawei. |

**Summary:** It seems that RAN2 assumptions can be confirmed. It also seems that the consensus wrt whether source or destination IP addresses are used to differentiate the data to different logical DUs is neither reachable nor needed – this can be up to implementation.

**Proposal 6: Agree the following and inform RAN2 accordingly:**

* **For the upstream data handling at the BAP of mobile IAB MT, the F1AP BAP configuration for each logical DU should be configured/controlled by the DU’s respective donor-CU via the corresponding F1AP connection.**
* **For the downstream data handling arriving at the mobile IAB-node, the upper layers (e.g., IP layer) can differentiate the data to different logical DUs based on upper-layer header information.**

### “No PDU session” indication in NGAP HO signalling

**PP: Do you agree to the CR for TS 38.413 Support for mobile IAB in [Nok1471]?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Answer** | **Comment** |
| **Ericsson** | **Yes, but see comment** | Shouldn’t the new IE also be included in the NGAP HANDOVER REQUIRED message? |
| CATT | Yes, but | The same question from Ericsson. |
| Huawei | OK, see comment | For the NGAP HANDOVER REQUIRED message, not sure we need to add the new IE, since the following option 1 provided by Nokia’s paper should also ok:  option 1: not to introduce new IE, but just add text about the behaviour, e.g. “if the UE is an IAB-MT and does not have a PDU session, the AMF shall ignore the PDU session information.” |
| Qualcomm | Yes, but | May be Nokia can motivate why it is not in the NGAP HANDOVER REUQIRED message. |
| Lenovo |  | Agree with Ericsson. |
| Xiaomi |  | Agree with E/// |
| Fujitsu | Agree |  |
| ZTE | Agree |  |
| Nokia | Yes | For Ericsson comment, source AMF know there is no PDU session for the IAB-MT, e.g. no *PDU Session Resource Setup Request List* IE in the INITIAL CONTEXT SETUP REQUEST message. So source donor does not need to inform source AMF, and no change to HANDOVER REQUIRED message.  But HANDOVER REQUIRED message includes a mandatory *PDU Session Resource List* IE, so need new text saying AMF shall ignore this IE. |
| Samsung | Yes |  |
| **Ericsson again** | **With a modification** | We have done this already in 2 XnAP procedures in the same manner as this CR proposes it for NGAP HANDOVER REQUEST. We prefer using the same approach for NGAP HANDOVER REQUIRED, to **align the enhancements on all 4 instances.** |

**Summary:**

**Proposal 7: Discuss whether to agree the CR for TS 38.413 in R3-231471 or whether to revise it by introducing the “No PDU session” indication into the HANDOVER REQUIRED message.**

### “mobile-IAB authorized” indication in NGAP HO signalling

A RAN3#119 agreement states:

**NGAP Initial Context Setup Request, UE Context Modification Request and HO Request to include an IE with code points “mobile-IAB authorized”, “mobile-IAB not-authorized”.**

**PP: Would you agree to a CR mirroring the TP for TS 38.413 provided in [Hua1483]?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Answer** | **Comment** |
| **Ericsson** | **Yes** |  |
| CATT | Yes |  |
| Huawei | Yes | But maybe using TP template is better, since we will have BL CRs. |
| Qualcomm | Yes |  |
| Lenovo | Yes |  |
| Xiaomi | Yes |  |
| Fujitsu | Agree |  |
| ZTE | Yes |  |
| Nokia | Yes |  |
| Samsung | Yes |  |

**Summary:**

**Proposal 8: Agree theTP for TS 38.413 in R3-231483.**

### mIAB-MT HO and mIAB-DU migration towards different donors

**PP: Turn into an agreement the WA stating that the mIAB-MT and its co-located mIAB-DU can be handed over/migrated to different donor CUs.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree** | RAN3#119 agreements *de facto* confirmed the WA. |
| CATT | Agree |  |
| Huawei | Agree |  |
| Qualcomm | Agree |  |
| Lenovo | Agree |  |
| Xiaomi | Agree |  |
| Fujitsu | Agree |  |
| ZTE | Fine |  |
| Nokia | Agree |  |
| Samsung | Agree |  |

**Summary:**

**Proposal 9: Turn into an agreement the WA stating that the mIAB-MT and its co-located mIAB-DU can be handed over/migrated to different donor CUs.**

### Inclusion of mIAB-MT’s ULI with UE’s location update

**PP: Introduce a new *IAB-MT User Location Information* IE into the existing User Location Information NGAP IE.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree** |  |
| CATT | Agree |  |
| Huawei |  | Should be discussed in CB # IAB1\_General? |
| Qualcomm | Agree | Also discussed in CB of AI 13.1 |
| Lenovo | Agree |  |
| Xiaomi | Agree | Details can be discussed in CB IAB1 |
| Fujitsu | Agree |  |
| ZTE | Agree |  |
| Nokia | Agree |  |
| Samsung | Agree |  |

**Summary:**

**Proposal 10: Introduce a new *IAB-MT User Location Information* IE into the existing User Location Information NGAP IE.**

## Multiple consecutive partial migrations

### Retaining the mIAB-MT’s XnAP UE IDs at relevant CUs

**PP: For consecutive partial migrations:**

* **The mIAB-DU’s CU retains the UE XnAP IDs of the IAB-MT as long as the co-located mIAB-DU is connected.**
* **The mIAB-MT’s source donor CU retains the mIAB-MT’s UE XnAP ID until it has notified the mIAB-DU’s CU that the resources used for traffic proxying have been released.**

With respect to the second bullet, in **[Hua1483]** it is proposed that the source CU must retain the mIAB-MT’s ID if the mIAB-MT is connected. However, the source CU must retain the mIAB-MT’s ID even after the mIAB-MT’s HO – it needs to do so until it has notified the mIAB-DU’s CU that the resources used for traffic proxying have been released. The Moderator assumes that the notification should be sent after the mIAB-MT HO.

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree** |  |
| CATT | Agree | The second bullet is aligned with the understanding for partial migration in Rel-17. |
| Huawei | Partially agree | We agree the first bullet.  About the second bullet, our view is that the **mIAB-MT’s source donor CU retains the mIAB-MT’s ID till the completion of the mIAB-MT’s HO**. Because if the mIAB-MT is handed over to a new target CU, the source CU should release the BH resources related to this mIAB-MT directly, there is no reason to keep them, since no traffic related to this mIAB will be transmitted via the source CU’s topology after the MT’s HO.  Then we suggest a rewording:  **PP: For consecutive partial migrations:**   * **The mIAB-DU’s CU retains the UE XnAP IDs of the IAB-MT as long as the co-located mIAB-DU is connected.**   **The mIAB-MT’s source donor CU retains the mIAB-MT’s UE XnAP ID until the completion of the mIAB-MT’s HO.** |
| Qualcomm | This needs to be corrected. | There is a separate Xn UE ID allocated by each CU of a UE-associated connection between CUs. We must therefore be clear which of these two Xn UE IDs we are referring to.  Further, the DU’s CU should keep the Xn UE ID allocated to the MT by itself and the Xn UE ID allocated to the MT by the MT’s CU until it is notified that the MT has been migrated to a new CU. At this point, it can select a new Xn UE ID for this MT when talking to this MT’s new CU.  The DU’s CU should **NOT** release Xn UE IDs simply because the MT’s CU has released all traffic resources since this may be a temporary situation in case there are not UEs connecting to this DU.  We propose a rewording:  **PP: For consecutive partial migrations:**   * **The mIAB-DU’s CU retains the UE XnAP IDs allocated for an MT by itself and by the MT’s CU until it is notified that the MT has been migrated to another CU.** |
| Lenovo |  | For the first bullet, agree with QC that the UE XnAP ID need to be associated to which CU. And agree with the rewording from QC.  For the second bullet, suggest the rewording based on HW’s version:  **The mIAB-MT’s source donor CU retains the mIAB-MT’s UE XnAP ID allocated by itself and mIAB-DU’s CU until the completion of the mIAB-MT’s HO.** |
| Xiaomi | Agree | Agree QC’s rewording for the 1st bullet.  For the 2nd bullet, we prefer the original wording. |
| Fujitsu | See comment | Agree with the first bullet.  Agree with the revised second bullet proposed by Lenovo. |
| ZTE | Agree | For the second bullet, we are not sure about “until it has notified the mIAB-DU’s CU that the resources used for traffic proxying have been released.”. Could you please clarify when and which step/message does it refer to?  In Rel-17 partial migration, based on TS 38.401, the XnAP UE IDs are retained at target and source IAB-donor-CU as long as the target path is used for transport of traffic between the migrating node and the source IAB-donor-CU. Is the motivation of the second bullet the same as in R17?   |  | | --- | | NOTE: The XnAP UE IDs of the migrating node are retained at target and source IAB-donor-CU as long as the target path is used for transport of traffic between the migrating node and the source IAB-donor-CU. | |
| Nokia | Agree | For 1st bullet, agree with QC’s update  For 2nd bullet, Lenovo update is correct. But is this really needed? Since after the HO is completed, the MT’s target CU initiate Xn UE Context Release procedure, which release all context (e.g. XnAP ID, radio resource, etc) for the IAB-MT in source CU. |
| Samsung | See comment | Prefer Huawei’s rewording. |
|  |  |  |

**Summary:** The proposal is based on QC rewording.

**Proposal 11: For consecutive partial migrations, the mIAB-DU’s CU retains the UE XnAP IDs allocated for an mIAB-MT by itself and by the mIAB-MT’s CU until it is notified that the mIAB-MT has been handed over to another CU.**

### The interaction between the 3 CUs during consecutive partial migrations

The “three CUs” are:

* The mIAB-DU’s CU.
* The source CU for mIAB-MT’s HO.
* The target CU for mIAB-MT’s HO.

**PP-1: For consecutive partial migration, after the mIAB-MT HO is completed, the mIAB-MT’s source CU provides to the mIAB-DU’s CU inside the IAB TRANSPORT MIGRATION MODIFICATION REQUEST message:**

* **The UE XnAP ID assigned to the mIAB-MT by the target CU.**
* **The gNB-ID of the target CU.**

**PP-2: For consecutive partial migration, after the mIAB-MT HO is completed, the mIAB-DU’s CU sends the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message to the mIAB-MT’s target CU, including the UE XnAP ID assigned to the mIAB-MT by the mIAB-MT’s target CU as the “Non-F1-Terminating IAB-donor UE XnAP ID”.**

**PP-3: For consecutive partial migration, during the Xn handover preparation procedure, the mIAB-MT’s source CU sends to the mIAB-MT’s target CU:**

* **The mIAB-MT’s UE XnAP ID used by the mIAB-DU’s CU.**
* **The gNB-ID of mIAB-DU’s CU.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Agree/disagree** | **Comment** |
| **Ericsson** | **Agree to all** |  |
| CATT | Agree with PP-1 and PP-2 | PP-3 is not needed. Although the TMM message is the first message from the mIAB-DU’s CU to the mIAB-MT’s target CU, this message targets to a mIAB-node known to the mIAB-mMT’s target CU. **During the mIAB-MT migration, the target CU of mIAB-MT may regard the source CU of mIAB-MT as the mIAB-DU’s CU.** By the “Non-F1-Terminating IAB-donor UE XnAP ID” in the TMM message from the real mIAB-DU’s CU,the mIAB-MT’s CU can recognize the mIAB-node realize the message is from the real mIAB-DU’s CU, hence it can update the gNB-ID of F1-terminating IAB-donor CU as well as the XnAP UE ID on that CU for the mIAB-node. |
| Huawei | Agree to all |  |
| Qualcomm | Disagree with PP1  Agree with PP2  Disagree with PP3 | On PP1: We prefer to reverse the prior agreement and have this information passed via the IAB-node, i.e., included in handover command and then passed to DU’s CU via F1AP. This is much easier.  On PP3: Why is this necessary? The DU’s CU itself can send an Xn TMManagement Request to the MT’s target CU. |
| Lenovo | See comments | PP1: Agree with the information, and the UE XnAP ID assigned to the mIAB-MT by the target CU needs to be specified for the Xn interface between target CU and mIAB-DU’s CU. In addition, the message to carry the information can be FFS.  PP2: same to PP1, the UE XnAP ID assigned to the mIAB-MT by the target CU needs to be specified for the Xn interface between target CU and mIAB-DU’s CU.  PP3: Cannot see the necessary to inform target CU with the information. |
| Xiaomi | PP1: agree but the message is FFS  PP2: agree  PP3: need clarification | We think PP1+PP2 can work well for DU’s CU to initiate transport migration procedure. But we think the message used for PP1 can be a class 2 message. |
| Fujitsu | PP1: see comment  PP2: agree  PP3: unnecessary | PP1: prefer QC’s proposal. Fine with PP1 if majority support. |
| ZTE | PP-1: agree  PP-2: agree  PP-3: disagree | What is the motivation for PP-3? We think it’s not needed. |
| Nokia | Agree to all |  |
| Samsung | Agree to all |  |

**Summary:** Note that Proposal 2-2 in Section 3.1.3 may be relevant for this discussion. The delta of PP-1 wrt current agreement is the message used, and there is no consensus on the message used, so nothing is proposed. In addition, one company wants to revert the agreement, but there is not enough traction to make any proposal based on PP-1. PP-3 seems redundant.

**Proposal 12: For consecutive partial migration, after the mIAB-MT HO is completed, the mIAB-DU’s CU sends the IAB TRANSPORT MIGRATION MANAGEMENT REQUEST message to the mIAB-MT’s target CU, including the UE XnAP ID assigned to the mIAB-MT by the mIAB-MT’s target CU as the “Non-F1-Terminating IAB-donor UE XnAP ID”.**