**3GPP TSG-RAN WG2 Meeting #116-bis-e R2-2202050**

**E-meeting, January 17 – 25, 2022**

**Agenda item:** 8.4.1

**Source:** Qualcomm Incorporated (Rapporteur)

**Title:** [Post116bis-e][079][eIAB] Open Issues (Qualcomm)

**Document for:** Discussion

# 1 Introduction

This document captures:

* [Post116bis-e][079][eIAB] Open Issues (Qualcomm)

Scope: Determine if Company input by Pre117-e discussions shall be used, and how many / which Pre-discussions shall be done. Capture Open Issues not captured in the CR email discussions and suggest how to treat. [After finalization, Merge open issues from other discussions into a WI OI list (OI for which company input is invited in some way shall be listed in the WI-list).

Intended outcome: Open Issues list, and organization of Pre117-e Company input discussions for the WI.

Deadline: Short.

The deadline is Friday Jan 28 0800 UTC.

# Discussion

All issues identified in the other Post116bis-e discussions need to be addressed and are not separately captured here.

## Update of ST2

We need to update ST2 38300 and 37400. This discussion should include latest agreements as well as RAN3’s BL CR on 38.300 in R3-221230. Further, all editor notes need to be addressed.

**This could be done via email discussion.**

**Q1: Are there other aspects related to ST2 TSs to be considered? Do you agree that email discussion is sufficient?**

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| **Company** | **Comment** |
| Samsung | Agree that email discussion is sufficient. |
| Intel | Agree |
| Apple | Agree |
| ZTE | Agree |
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**Summary:**

There is agreement that ST2 issues should be handled via email discussion.

**Proposal 1: Remaining ST2 issues, e.g., inclusion of latest agreements and removal of editor notes, to be discussed via email.**

## MAC

Please provide comments related to MAC in the MAC-related thread.

The rapporteur noticed that the following MAC CE requested by RAN1 in R2-2200095 still needs to be handled:

*“Signaling from an IAB-node/IAB-donor to a child node indicating beams of an the child IAB-DU in the direction of which simultaneous operation is restricted.”*

**This could be done via email discussion.**

**Q2: Any comments on the MAC CE related to RAN1 agreement above? Do you agree that email discussion would be sufficient?**

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| **Company** | **Comment** |
| Samsung | Please note that there is a dedicated (short) MAC discussion which focuses on update to CR but also on collecting open issues (as acknowledged by the rapporteur above). This present discussion [079] should then collate those issues as well.  But in general we agree that the only open issues to do with MAC are new MAC CE(s) requested by RAN1, and this could be handled via an email discussion. There is no need for separate contributions to the meeting on this matter.  One additional outstanding issue is padding BSR but this is minor and could also be handled via a single email discussion dedicated to open MAC issues. |
| Intel | Agree with Samsung. |
| Apple | There are indeed multiple MAC CEs that still need to be added, power adjustment, PSD range, recommended beam indication, restricted beam indication, also, there are still some FFS in RAN1. Fine to do this via email. |
| Huawei, HiSilicon | For the rest MAC CEs, the problem is RAN1 will complete the information by the end of next meeting. So, probably, we need a post email to discussion and add those MAC CEs. I expect those MAC CEs are not able to be discussed by AT-117 offline. |
| ZTE | It was agreed in RAN2#116bis-e meeting that RAN2 should focus on 2 new timing modes (Case-6 timing and Case-7 timing) for Desired guard symbols and Provided guard symbols, as well as on the Case-7 timing offset (deprioritizing work on other MAC CEs until further input from RAN1/RAN4 is received).  However, we would like to discuss the Child IAB-DU Restricted Beam Indication MAC CE earlier considering that there is no leftover work/FFS issue on this MAC CE in RAN1/4. So we prefer that RAN2 could start the discussion on this MAC CE based on RAN1’s LS now. And we think the email discussion would not be sufficient. |
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**Summary:**

The rapporteur is aware of the parallel threads mentioned by some companies. However, the MAC CE discussed here was not included in any of the other thread

The rapporteur agrees that RAN1 may request further MAC CEs. Obviously, RAN2 cannot discuss those before RAN1 has agreed what they should contain. Therefore, we can only address what RAN1 has requested so far.

Everybody agrees that email discussion is sufficient.

**Proposal 2: MAC CE for beam indication signaling as proposed by RAN1 to be discussed via email.**

## BAP

Please provide comments related to BAP in the BAP-related thread.

We need to further address the FFS from the agreement of this meeting:

* Referring to previous agreement “*Will have rewriting mapping configuration(s) Old routing ID to New routing ID that limits the possible rewriting (for all cases of re-writing)*”: It is FFS whether for upstream there would be a configuration optimization such that the “New Routing ID” is the same for all entries (a.k.a. default routing ID)

The following options for the optimization of rewriting mappings for UL inter-donor-DU re-routing have been proposed in prior meetings/discussions:

**Option a:** No optimization, i.e.,inter-donor-DU re-routing uses configurations of (Ingress BAP routing ID, Egress BAP routing ID)-pairs. For this option, we need to resolve the ambiguity between re-routing and inter-topology routing for a boundary node as discussed during [AT116bis-e][049][eIAB].

**Option b:** Rewriting mapping for inter-donor-DU re-routing is based on a default egress BAP routing ID(s) configured for each parent link.

**Option c:** Rewriting mapping for inter-donor-DU re-routing is based on the BAP routing IDs included in the routing entries configured for each parent.

**Option d:** Others.

**This could be done via email discussion.**

**Q3: Any comments on this topic? Do you agree that email discussion would be sufficient?**

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| **Company** | **Comment** |
| Samsung | Just to reiterate our view that using the default routing ID does not violate any previous agreement and that our answer to the ‘FFS’ is yes. Perhaps this topic should be driven by company contributions? We’d be very happy to hear other views. |
| Intel | Agree. |
| Apple | Agree. |
| Huawei, HiSilicon | We can assume a as the baseline. The issue is: if we can only conclude this in next meeting, there is no time left for RAN3 to design the signalling in next meeting. Or, do we expect RAN3 to make the decision? The point is option a in BAP does not preclude RAN3 optimization on signalling (e.g. able to configure the default.)  Maybe proponent should clarify the coordination between RAN2 and RAN3. |
| ZTE | In our view, option c is the most simplest way. However, if option a is preferred if option c is not acceptable. In our view, option b could be implemented by configuring the same new routing ID for all entries. For option a, the issue of how could CU2 determine the egress routing IDs needs to be further discussed as below:  Issues 1: Is the mapping between ingress routing ID and egress routing ID based on QoS info of the upcoming rerouted packets? If yes, CU1 needs to send such QoS info to CU2 in advance considering that the rerouting is mainly triggered by RLF. The signaling and the timing of sending the Qos info needs to discuss as well (perhaps more RAN3 work).  Issue 2: If the egress routing ID is not configured per QoS, how CU2 determines the mapping between ingress routing ID and egress routing ID needs to be discussed as well. |
| Nokia | **Open issue:** How to handle re-routed packets in the boundary node, i.e., BAP PDUs that have been re-routed earlier based on BAP address only and the BAP address points to non-F1-terminating topology or inter-donor-DU re-routing is required.  - these BAP PDUs require header rewriting; with the above agreement, there are two alternatives:  1) header rewriting configuration of the boundary node shall include all ingress Routing IDs that possibly could reach the boundary node => makes header rewriting configuration much more complex than routing configuration  2) BAP PDUs re-routed based on BAP address only are discarded by the boundary node if no entry in the header rewriting configuration  We have been promoting an alternative where the re-routing should be based on the BAP address only (as in Rel16), which would simplify the header rewriting configuration significantly.  We will provide a Stage 3 text proposal. |
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**Summary:**

The replies indicate that this issue is indeed very controversial. The following issues have been raised:

* Samsung: Optimizations should be supported. Company contributions may be considered
* Intel/Apple: Email discussion sufficient.
* Huawei: Option a should be baseline. If discussion is based on company contributions RAN3 would not have time to specify the signaling.
* ZTE: Wondering based on what criteria the individual mappings in options a would be differentiated. The believe option c is the easiest.
* Nokia: Proposes yet a different concept of rerouting based on BAP address only.

The rapporteur’s view:

* Option c can be done via implementation without any further signaling. Therefore, if RAN2 cannot manage to agree on anything, Option c would still work, and inter-donor-DU rerouting could still be supported.
* Option a and b need additional signaling for configuration to be specified. Therefore, Options a and b could be considered optimizations to Option c. Huawei is right that contribution-driven work would delay matters for RAN3 to define the signaling, in case this would be necessary. This implies that we should decide on the support for these options via email. This would be inline with Samsung’s view to consider all options.
* Nokia’s proposal is not in line with the above agreement.

**The rapporteur concludes:**

Optimization of rewriting mapping configurations for UL inter-donor-DU re-routing to be discussed via email.

**Proposal 3a: BAP re-writing mapping configurations for UL inter-donor-DU re-routing to be discussed via email. The discussion to include option a to d identified in [Post116bis-e][079].**

## RLF indication

The rapporteur believes that we have exhausted this topic. The type-2/3 RLF indications were supposed to provide performance optimization during BH RLF recovery. This performance optimization is already small since BH RLF recovery is expected to be a rare *and* short event.

So far, the only purpose of this indication we agreed to capture on ST2 was local UL re-routing. This, obviously, only applies if the child node is dual connected. We further watered this down by not making it mandatory even if available. We could not agree to propagate this type-2 indication, which means that it cannot benefit any dual-connected descendent node further down the tree. We further could not agree to capture any other purposes of the type-2 indication in the spec.

The remaining open issues only relate to corner cases and further optimizations, e.g., partial re-routing, adding information on the type-2 indication, etc. The rapporteur does not believe that any further discussion would lead to convergence on the remaining matters or would add benefit to an already critically slimmed down feature.

For these reasons, we can stop ST2 discussions on type-2/3 RLF indication. Remaining issues can be included in St3 discussions (BAP and RRC).

**Q4: Any comments on this topic?**

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| **Company** | **Comment** |
| Samsung | OK to stop ST2 discussions but do not agree all the remaining issues are ‘corner cases’. However we are ok to discuss them in BAP and RRC discussions, so long as this does not mean we have excluded certain specific outstanding issues. Alternatively, the rapporteur could please share a list of such proposed exclusions, and we could then discuss this list? Otherwise the proposal seems a bit vague to us. |
| Intel | Agree. |
| Apple | Company views on this topic are quite diverse and still a bit far from being aligned. We are fine to start including topics in stage-3 that are concluded, but for the rest, it would be good to continue the discussion. The RLF discussion is not yet summarized for open issues and may only come a bit later. |
| Huawei, HiSilicon | We are fine to STOP ST2, if it means no propagation and no more information included in type2 indication. |
| ZTE | Currently there’s no conclusion on whether Type-2 is propagated further and whether any routing information is included in the type 2 indication triggered by dual-connected node yet. As stated by the rapporteur, the only purpose of this indication we agreed to capture on ST2 was local UL re-routing for dual-connected node. In our view, the above two issues are key points for this feature. So we cannot agree to stop st2 discussion on type 2/3 RLF indication at this stage. And we agree that stage 3 discussions in BAP and RRC could get started now. |
| Nokia | Propagation of type-2/3 indications was not ruled out but remains an open issue.  On this agreement:   * [048] Execution of local re-routing of all affected traffic among re-routable traffic upon BH RLF is not mandatory for a node capable of local re-routing. This can be revisited if there is a severe issue.   We believe this actually deviates from Rel.16 and should therefore be revoked. The agreement was justified by this BAP note, which was interpreted to mean that all local re-routing is optional in Rel.16:  *NOTE: Data buffering on the transmitting part of the BAP entity, e.g., until RLC-AM entity has received an acknowledgement, is up to implementation. In case of BH RLF, the transmitting part of the BAP entity may reroute the BAP Data PDUs, which has not been acknowledged by lower layer before the BH RLF, to an alternative path in accordance with clause 5.2.1.3.*  However, we think the purpose of this note and especially the highlighted text is that the BAP entity is allowed to retransmit (and reroute) previously transmitted but non-ACKed PDUs upon BH RLF. Local re-routing itself is specified in BAP section 5.2.1.3 and there is nothing optional about that:  - *else if there is an entry in the BH Routing Configuration whose BAP address matches the DESTINATION field, whose BAP path identity is the same as the PATH field, and whose egress link corresponding to the Next Hop BAP Address is available:*  *- select the egress link corresponding to the Next Hop BAP Address of the entry;*  *NOTE 1: An egress link is not considered to be available if the link is in BH RLF.*  *NOTE 2: ...*  *- else if there is at least one entry in the BH Routing Configuration whose BAP address matches the DESTINATION field, and whose egress link corresponding to the Next Hop BAP Address is available:*  *- select an entry from the BH Routing Configuration whose BAP address is the same as the DESTINATION field, and whose egress link corresponding to the Next Hop BAP Address is available;*  *- select the egress link corresponding to the Next Hop BAP Address of the entry selected above;*  Further, lack of conclusion on how the identified FFS work imply lack of functional (stage 2) understanding. Thus, we support to continue and address the open issues identified in the R2-2201937.  In particular, we find the following are open points that were not concluded and need to be resolved:  **Open point:** whether Type-2 is propagated further for single connection scenarios  **Open point:** whether Type-2 indication triggered by a dual-connected node includes a routing information. |
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**Summary:**

The replies confirm that this topic is very controversial. Many of the replies missed the crucial points that:

* The controversial St2 issues have been discussed for quite some time without reaching consensus. There was not even a clear majority that type-2/3 RLF indication should be propagated. There was not even a clear majority to include additional information on these indications apart from what this information would be.
* We are approaching the last meeting before functional freeze. There are no signs that further ST2 discussion would provide consensus on these issues. In fact, the outcome of this discussion already shows that convergence on these issues is very unlikely.
* We should use the remaining meeting to tie up loose ends on St3 as was pointed out.

**Proposal 4: Remaining St3 issues of RLF indication to be discussed via email.**

## RAN3 efforts

RAN3 agreed to proceed with solution 1 for latency reduction of intra-donor topology adaptation. RAN3 informed RAN2 about this solution in LS in R2-2106948. RAN2 replied with potential concerns in LS in R2-2109108.

Related to solution 1, RAN3 further agreed in this meeting:

**CHO combined with solution#1 is not addressed by RAN3 unless requested by RAN2.**

RAN2 should discuss RAN2-related aspects of RAN3’s solution 1.

**This could be done via email discussion.**

**Q5: Any comments on this topic? Other RAN3 topics to be discussed in RAN2? Do you agree that email discussion would be sufficient?**

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| **Company** | **Comment** |
| Samsung | Agree that email discussion is sufficient. |
| Intel | For solution 1, RAN3 has also agreed following agreements:  **WA: Upon migration/HO failure case, the buffered RRC message is still transferred to child node.**  **Agree to confirm solution 1: An IAB-DU buffers an RRC message for a child IAB-MT based on an indication in the F1AP message carrying this RRC message.**  From RAN2 point of view, there’s still open issues on how to handle the received RRC messages upon migration failure. This is because, except bap-config, the received RRC messages would carry other RRC configurations. It is important for RAN2 to discuss how to handle such messages if partial information is expired.  Since RAN2 didn’t have enough time to discuss this topic during previous meetings, we think this topic should be discussed based on company’s contribution to have a clearer view on how the solution is solved in RAN2. |
| Huawei, HiSilicon | This depends on how many companies supporting “CHO plus sol.1”.  In RAN3 discussion, there is only extremely minority companies supporting this.  So, we don’t need on email on this, unless we received quite a lot of proponent contributions. Also, please note there is no RAN3 feasible solution on table.  **RAN3 believes the CHO combined with solution#1 is not feasible.** |
| ZTE | In the RAN2 reply LS R2-2109108, it was captured that “RAN2 observes that trigger conditions for both Solution 1 (to forward withheld RRCReconfiguration) and Solution 2 (to send the L1/L2 indication) require further discussion. Interaction of CHO with both solutions may also need further discussion. The case of IAB-node migration failure needs to be discussed for solution 1, and the impacts for solution 2 are provided above.”. So the issues mentioned in the reply LS related to solution 1 needs to be discussed in RAN2. |
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**Summary:**

ZTE and Intel believe that RAN2’s reply LS to RAN3 on solution 1 emphasized that additional discussion would be necessary in RAN2. Since RAN3 agreed to support solution1 and not solution 2, this discussion should only address solution 1. Further, since RAN3 already made the WA to support solution 1, RAN2 should focus on the potential show stoppers and how to overcome them, rather than discussing if this functionality should be supported.

No other RAN3 issues were mentioned in the replies.

Email discussion seems sufficient.

**Proposal 5: RAN3’s working assumption on Solution 1 for latency reduction of intra-donor topology adaptation to be discussed via email. The discussion to focus on potential obstacles of RAN3’s working assumption and agreements on solution 1 and how to overcome them.**

## Other issues

Please indicate if there are any other issues which need discussion and have not been captured above, e.g., related to:

* CP-UP separation
* UE capabilities
* Topology adaptation
* Others

**Q6: Any aspects missed? Do you believe that these aspects can be discussed via email discussion?**

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| **Company** | **Comment** |
| Samsung | We think the list above captures well the key overarching topics. Is the proposal to have a single email discussion for all of them? Perhaps we could use company contributions instead, but agree on a specific list of topics first? |
| Intel | As captured in Chair’s Note, following aspects of UE capabilities need to be discussed and solved:   * FFS UE capability for Rel-17 intra-donor DU local-rerouting and inter-donor DU re-routing. * FFS whether need to differentiate the capability between “inter-donor CU partial migration” and “inter-donor CU routing for topology redundancy” * FFS the feature group for BAP header rewriting based inter-donor CU routing * FFS the feature group for local rerouting |
| Apple | Agree with Samsung. |
| Huawei, HiSilicon | “Topology adaptation” is not clear.  There seems no left for CP-UP separation, which can be done by RRC running CR discussion. |
| ZTE | For inter-donor-redundancy, the issue of how to handle the IP addresses allocated by non-F1-terminating donor needs to be discussed. Specifically, when boundary IAB-MT receives the RRC message including the IP addresses allocated by non-F1-terminating donor, it may replace the old IP addresses with the new IP addresses. However, the F1-U tunnel to be migrated and F1-U tunnel not to be migrated may share the same IAB-DU IP address. As a result, the IAB-DU IP address of the F1-U tunnel not to be migrated would be replaced wrongly. RAN2 needs to discuss how to handle this issue. |
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Summary:

The following additional issues were raised:

* Further St3 details on CP-UP separation, which can be handled as part of RRC Running CR discussion. The rapporteur agrees.
* UE capabilities related to local rerouting, inter-donor-DU re-routing, BAP header rewriting, inter-donor-CU partial migration and inter-donor-CU routing for topological redundancy. The rapporteur emphasizes that local re-routing as defined in Rel-16 was considered a part of BAP and therefore mandatory. Further, the St2 issues of inter-donor-DU re-routing and BAP header rewriting need to be resolved first before we can consider the corresponding UE capabilities. The rapporteur believes that aspects related inter-CU handover and inter CU NR DC may have to be captured in UE capabilities. RAN3-related aspects of inter-CU partial migration and redundancy should be handled by RAN3 (and they don’t have any capability signaling).
* IP address related issues. The rapporteur believes that the IP address related issues mentioned may certainly be relevant but should be handled by RAN3.
* Samsung raised the question if on the number of email discussions. The rapporteur believes that multiple email discussion will be necessary based on topic.

**Proposal 6: UE capabilities for the IAB-MT’s inter-CU HO and NR DC to be discussed via email.**

**Proposal 7: Remaining RRC-related ST3 aspects of CP-UP separation to be discussed via email.**

## Summary of other RRC discussion

Summary of email discussion:

[*Proposal 1 RAN2 to assume that other fields (besides the bap-address) in the bap-config may* be included by the network implementation, when bap-config is configured for the SCG in mrdc-SecondaryCellGroup.](#_Toc94260120)

Apart from this proposal, the discussion did not identify further open issues. However, section 2.6 above identified potential RRC issues related to CP-UP separation.

## Summary of other MAC discussion

Summary of email discussion:

*Based on the input received above and responses from discussion rapporteur, the next iteration of the running MAC CR is now available in R2-2201984, which the rapporteur submits for endorsement by RAN2.*

No other issues were identified in this discussion. However, section 2.2 identified the MAC CE for the beam direction to be defined.

## Summary of other BAP discussion

A summary of the BAP discussion was not available. However, the discussion document identified multiple issues to be addressed, which have been copied here:

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| **Issue number** | **Issue description** | **Suggestion how to treat** |
| **BAP#01** | Considering below options for the scenario of inter-to-intra-topology re-routing:  Option 1: No header rewriting is applied, and the upstream packet’s BAP routing ID in the ingress topology contains the BAP address of the IAB-donor-DU in the same topology.  Option 2: Header rewriting is applied based on a header-rewriting entry, which contains the packet’s ingress BAP routing ID and the BAP routing ID of the packet’s egress topology after inter-to-intra re-routing.  Option 3: Header rewriting is applied based on a header-rewriting entry, which contains the BAP routing ID of the packet’s intended egress topology after inter-topology routing and the BAP routing ID of the packet’s egress topology after inter-to-intra re-routing.  Option 4: The boundary node is configured with a default BAP routing ID for each topology via RRC, and such default BAP routing ID can be used as the egress routing ID when applying inter-topology rerouting. | Down-selection among those options, based on the discussion/contribution in next meeting.  Companies’ paper are welcome, taking into account the offline summary R2-2201879. [TP are also welcome] |
| **BAP#02** | The RAN3 signalling on how to include/configure the “information” in below:  The BH RLC CH mapping configuration of the boundary node includes information for the boundary node to differentiate mappings based on ingress topology and egress topology.  The UL mapping configuration to include information for the boundary node to determine the egress topology of each UL mapping entry.  The routing configuration to include information that allows the boundary node to determine the topology each routing entry applies to. RAN3 to decide on St3-related aspects. | Wait for the RAN3 detailed signalling design. |
| **BAP#03** | For inter-topology routing, the header rewriting configuration to include information that allows the boundary node to determine either the egress topology, or the ingress topology, or the traffic direction of a header-rewriting entry (selection of one of these expected) | Down-selection among 3 options in RAN2 and then wait for the RAN3 detailed signalling design. |
| **BAP#04** | FFS on whether the header rewriting configuration to include information that allows the boundary node to determine the entry for re-routing. | Decision is needed in next meeting.  To be considered together with BAP#03. |
| **BAP#05** | FFS on granularity of per BH RLC channel level for local re-routing triggered by flow control feedback. | Quick decision next meeting online.  No need of companies’ contribution on this. |
| **BAP#06** | FFS for type4 indication on whether to use “BH RLF recovery failure indication” or existing name “BH RLF indication”. | Quick decision next meeting online.  No need of companies’ contribution on this. |
| **BAP#07** | FFS Type-2 indication triggered by a dual-connected node does not include any routing information | Quick decision next meeting online.  No need of companies’ contribution on this. |
| **BAP#08** | FFS whether Type-2 is propagated further:[below is copied from minutes]   * 1: FFS whether Type-2 is propagated further for single connection scenarios (single connection from UP point of view). * 2: FFS whether Type-2 is propagated further for dual connection scenarios (dual connection from UP point of view), whether routing info need to be included for the indication to be useful in such scenarios, whether the indication need to be regenerated for the indication to be useful in such scenarios. FFS what should be the meaning/semantics to the receiver of a propagated Type-2 indication in such scenario. | Quick decision next meeting online.  Proponent’s contribution to clarify the details FFS is welcome. |
| **BAP#09** | FFS for type-3 indication, if genetic condition “upon recovery” from BH RLF is sufficient. | Quick decision next meeting online.  No need of companies’ contribution on this. |

BAP#1 addresses issues related to those identified in section 2.3. The rapporteur believes that BAP#1 options 1 to 4 and section 2.3 options *a* to *c* should be discussed together via email.

BAP#2 and BAP#3 could be left up to RAN3 decision, which won’t happen before next meeting. These issues could also be included in the RAN2 email discussion before next meeting. In case RAN2 converges in this email discussion, RAN3 could follow RAN2’s decision in the ST3 specification.

BAP#4 is interdependent with BAP#1/Section 2.3 and should be included in that discussion.

BAP#5 implies support of BAP routing IDs to be carried on the Type2 RLF indication, which is proposed in BAP#7. This matter was discussed for ever and did not find sufficient support. There is no benefit to continue the discussion on this ST2 matter.

BAP#6 has been discussed forever without leading to a clear majority. This matter can indeed be resolved via show-of-hands in online meeting.

BAP#8 has been discussed forever without leading to a clear majority. There is no benefit to continue the discussion on this ST2 matter.

BAP#9 addresses a technical issue which could be included into the email discussion.

In summary, the following open issues should be addressed via email discussion:

* Inter-donor-DU re-routing rewriting options discussed in section 2.3 and BAP#1, including BAP#4.
* BAP#2 and BAP#3.
* BAP#9.

**Proposal 3a (repeated here from section 2.3): BAP re-writing mapping configurations for UL inter-donor-DU re-routing to be discussed via email. The discussion to include option a to d identified in [Post116bis-e][079].**

**Proposal 3b: The BAP discussion to further include aspects BAP#1, BAP#4, BAP#2, BAP#3 and BAP#9 identified in [Post116bis-e][078].**

# 3 Conclusion

Based on the discussions [Post116bis-e][079]/[078]/[077]/[076], the following open issues were identified:

**Proposal 1: Remaining ST2 issues, e.g., inclusion of latest agreements and removal of editor notes, to be discussed via email.**

**Proposal 2: MAC CE for beam indication signaling as proposed by RAN1 to be discussed via email.**

**Proposal 3a: BAP re-writing mapping configurations for UL inter-donor-DU re-routing to be discussed via email. The discussion to include option a to d identified in [Post116bis-e][079].**

**Proposal 3b: The BAP discussion to further include aspects BAP#1, BAP#4, BAP#2, BAP#3 and BAP#9 identified in [Post116bis-e][078].**

**Proposal 4: Remaining St3 issues of RLF indication to be discussed via email.**

**Proposal 5: RAN3’s working assumption on Solution 1 for latency reduction of intra-donor topology adaptation to be discussed via email. The discussion to focus on potential obstacles of RAN3’s working assumption and agreements on solution 1 and how to overcome them.**

**Proposal 6: UE capabilities for the IAB-MT’s inter-CU HO and NR DC to be discussed via email.**

**Proposal 7: Remaining RRC-related St3 aspects of CP-UP separation to be discussed via email.**

The rapporteur emphasizes that Proposal 3a and BAP#1/4 in Proposal 3b would be candidates for company contributions. However, these aspects have been discussed in company contributions as well as in email discussions before. Further, the outcome of this discussion would have to be available for RAN3 at the next meeting so that they can specify the signaling necessary. For that reason, it would be advantageous to resolve the matter via Pre-117 email discussion rather than via company contribution + AT-117 offline/online discussion.

The rapporteur has not included ST2 aspects of RLF indication even though such aspects were raised in the open issues discussion. The rapporteur believes that these ST2 issues have been discussed for many months without reaching consensus or even converging. For that reason, the rapporteur does not believe that further ST2 discussion on this topic will be promising.