3GPP TSG-RAN WG2 Meeting #113bis Electronic R2-210xxxx

Online, 12 April – 20 April 2021

**Agenda item: 6.1.2**

**Source: Xiaomi (Rapporteur)**

**Title: Offline 014 on Stage 2 Corrections**

**WID/SID: NR\_newRAT-Core - Release 16**

**Document for: Discussion and Decision**

# 1 Introduction

This document is the report of the following email discussion:

* [AT113bis-e][014][NR16] Stage-2 (Xiaomi)

Scope: Treat R2-2102609, R2-2103640, R2-2104218, R2-2104219, R2-2103048, R2-2103880, R2-2104172, R2-2104208, R2-2104209, R2-2104252, R2-2103557, R2-2104015

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed-in-principle CRs, Approved LS out if applicable

Deadline: Schedule A

**Schedule A** (a schedule for main session for many offline dicussion):

A first round with **Deadline for comments Wednesday April 14 1000 UTC** to settle scope what is agreeable etc (phase 1)

A pre-final round with **Deadline for any functional and/or scope comments Monday April 19 1800 UTC.** At this point all non-agreeable parts shall be removed/excluded. (phase 2)

A final round (last 24h) for checking and smaller simplification / removal comments only including agreeable parts, with Deadline **EOM** (at this point all outcome documents need to be available in inbox with tdoc numbers).

Additional check-points etc if needed are defined by the Rapporteur. Offline discussion rapporteur must notify chairman / session chair if on-line comeback discussion is needed, if discussion doesn’t converge etc.

# 2 RAN1 modification on TRP description

The CR [R2-2103640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103640.zip) on TRP description is to capture with the TRP description modification as suggested by the RAN1 LS [R2-2102609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2102609.zip).

**Question 1**: Do you agree on the CR [R2-2103640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103640.zip)?

Rapporteur’s Note: Company who does not agree or partially agrees with the CR can provide the suggested changes in the “Technical Arguments & Possible Changes” column.

|  |  |  |
| --- | --- | --- |
| Answers to Question 1 | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| Lenovo | Yes but | What about RAN1’s suggestion to make the Multiple Transmit/Receive Point Operation a subclause of “5 Physical layer” instead of a subclause of “6? |
| OPPO | Yes |  |
| Nokia (rapporteur) | Yes | To Lenovo's question: The RAN1 suggestion doesn't change much so we think that's not the most essential part. This way we also don't need to void any sections, keeping the specification cleaner. |
| Qualcomm Incorporated | Yes |  |
| Samsung | Yes |  |
| Intel | Yes |  |
| Apple | Yes |  |
| ZTE  (Dong Fei, dong.fei@zte.com.cn) | Yes |  |
| CATT | Yes |  |
| LG | Yes |  |
| Huawei, HiSilicon | Yes |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 1**: TBD.

**Proposal 1**: TBD.

# 3 TRP definitions for MIMO and positioning

The CRs on TRP definitions for MIMO and positioning were submitted in [R2-2104218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104218.zip) (for 38.300) and [R2-2104219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104219.zip) (for 38.331). The CRs argue that there are two TRP definitions, i.e. one for the co-located antennas for the positioning purpose as provided in 37.355 and one for either co-located or non-collocated antennas for MIMO as provided in 38.300. Some clarifications should be given on differentiating the two different TRP definitions. The definition of TRP in 37.355 is quoted as follows:

|  |
| --- |
| 37.355:  **Transmission Point (TP):** A set of geographically co-located transmit antennas (e.g. antenna array (with one or more antenna elements)) for one cell, part of one cell or one PRS-only TP. Transmission Points can include base station (eNodeB) antennas, remote radio heads, a remote antenna of a base station, an antenna of a PRS-only TP, etc. One cell can be formed by one or multiple transmission points. For a homogeneous deployment, each transmission point may correspond to one cell. |

The 38.300 CR [R2-2104218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104218.zip) argues that the TRP definition in 38.300 should be clearly defined as for either co-located or non-collocated antennas.

**Question 2A**: Do you agree with the intention of the CR?

|  |  |  |
| --- | --- | --- |
| Answers to Question 2A | | |
| Company | Yes/No | Technical Arguments |
| Lenovo | Yes but | We should align the definition of TRP in 37.355/38.305 and 38.300 as well. Otherwise, it looks bit odd why the definitions are different between the specs.  TRP definition in 37.355 and 38.305:  *Transmission-Reception Point (TRP): A set of geographically co-located antennas (e.g. antenna array (with one or more antenna elements)) supporting TP and/or RP functionality.*  TRP definition in 38.300:  *Transmit/Receive Point: Part of the gNB transmitting and receiving radio signals to/from UE according to physical layer properties and parameters inherent to that element.* |
| OPPO | Yes | Proponents |
| Nokia (rapporteur) | No | This was already discussed when the multi-TRP section was created: We have not even defined what co-located or non-collocated means, so using those is not is helpful. Furthermore NOT having the monikers there automatically means both cases are allowed (if network can do those). We also do not mention antennas since that was also controversial, and the TRP acronym is different to ensure it's understood to be different from the 37.355. And this was all discussed already at the time the original Stage-2 description was created!  Finally, if we start doing this, there could be lot of other similar "small clarifications" that do not add much of value to Stage-2 but make it longer. We don't see anything wrong with the existing definition. |
| Qualcomm Incorporated | Yes |  |
| Samsung | Yes |  |
| Apple | Yes | The change can be merged into rapporteur CR. |
| ZTE  (Dong Fei, dong.fei@zte.com.cn) | No | Agree with the NOKIA, according to the information from our RAN1 colleague, during RAN1 discussion,even though mTRP transmission is based on the assumption of co-location,but some companies think to limit the TRP transmission to the co-located antenna, and some companies think otherwise. In our understanding, for mTRP transmission, it depends on the NW implementation, there is no need for us to restrict the NW implementation. |
| CATT | Yes |  |
| LG | No | The 38.300 does not say anything about “co-located” TRP. The CR will make more confusion. |
| Huawei, HiSilicon | No | (Similar arguments as the other companies above) |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 2A**: TBD.

**Proposal 2A**: TBD.

**Question 2B**: If you agree with the intention, are you happy with the wording or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 2B | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 2B**: TBD.

**Proposal 2B**: TBD.

The 38.331 CR [R2-2104219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104219.zip) argues that the term of TRP (or mult-TRP) is used in several different places. The TRP description used in the field ***dl-PRS-ID*** and ***dl-PRS-ResourceId*** should be used only for the co-located antenna for the positioning purpose as defined in 37.355, and the TRP description used in other places should be for either co-located or non-collocated antenna as defined in 38.300.

**Question 2C**: Do you agree with the intention of the CR?

|  |  |  |
| --- | --- | --- |
| Answers to Question 2C | | |
| Company | Yes/No | Technical Arguments |
| Lenovo | Partly | * The 1st change is not needed as the TRP definition is not that critical to be added in general requirements and instead, can be clarified if needed in the concerned field description. * The 2nd change is ok. |
| OPPO | Yes | Proponent |
| Nokia, Nokia Shanghai Bell | Partly | We are fine to clarify the dl-PRS-ID field description but not the procedural part: We NEVER add such statements to RRC procedural text and it doesn't seem needed here, either. So the first change is not agreeable to us. |
| Qualcomm Incorporated | Yes, but | We think the reference to TR should be avoided and a TS should be used instead. |
| Samsung | Yes |  |
| Apple | Yes, but | Same view as QC. |
| ZTE  (Dong Fei, dong.fei@zte.com.cn) | Yes | Proponent |
| CATT | Yes |  |
| LG | Partly | Ok for 2nd change. |
| Huawei, HiSilicon | Parlty | We can only accept the second change |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 2C**: TBD.

**Proposal 2C**: TBD.

**Question 2D**: If you agree with the intention, are you happy with the wording or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 2D | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 2D**: TBD.

**Proposal 2D**: TBD.

# 3 SRVCC

A CR on the handover with SRVCC operation to UTRAN was submitted in [R2-2103048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103048.zip). The CR argues that the interface for handover to 3G has size limitation up to 2560 octets, which was captured in 36.300 for E-UTRA to UTRAN SRVCC. Then the corresponding Note missing in 38.300 should be added.

**Question 3A**: Do you agree with the intention of the CR?

|  |  |  |
| --- | --- | --- |
| Answers to Question 2A | | |
| Company | Yes/No | Technical Arguments |
| Lenovo | Yes but | The proposed note looks out of context as the size limit is related to the interfaces involved in the handover. So some further improvements are needed. |
| OPPO | Yes | We are ok on the clarification added by Lenovo below which is clearer than the proposed CR. |
| Nokia (rapporteur) | Yes | We have indicated co-signing of the CR offline but this has not been captured, so would like to revise CR so that the co-signing is added. |
| Qualcomm Incorporated | Yes |  |
| Samsung | Neutral | We don’t think it is an essential correction but can agree if majority support the change |
| Intel | Yes | OK to have this clarification also in NR |
| Apple | Yes | We agree with the intention. However, we would like to make it clear that “the size limit of inter-Node signaling is 2560 octets." |
| CATT | Yes, but | We agree with the intention, but the note should be located with relevant text. |
| LG | Yes |  |
| Huawei, HiSilicon | Yes | The intention is ok, but it’s more like a RAN3 issue, and should be decided by RAN3. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 3A**: TBD.

**Proposal 3A**: TBD.

**Question 3B**: If you agree with the intention, are you happy with the wording or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 2B | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| Lenovo |  | The proposed note should be moved up to the bullet point below. Furthermore, a further subbullet point highlighted in color should be added:  *The source NR node initiates the handover preparation only for the ongoing IMS voice and provides the indication to AMF that the handover is towards UTRAN together with the target UTRAN Node ID. The source NR node also provides an indication to the target UTRAN that the incoming handover originates from 5G. The SRVCC proceeds as specified in TS 23.216 [34];*   * The source NR node shall ensure that the size of the Source to Target Transparent Container does not exceed the limits that can be handled by interfaces involved in the handover.   NOTE: For SRVCC handover, the size limit is 2560 octets (see AN-APDU in TS 29.002 [44]). |
| Nokia |  | Regarding Lenovo’s suggestion, for consistency with the rest of the subclause (where things can also go wrong if the network does not behave as it should), we would prefer just stating that “the source NR ensures that the size…” |
| Qualcomm Incorporated |  | The proposed text is unclear what the size limitation is for. |
| Intel | No | The LTE NOTE was immediately below relevant text that provided the context. In the CR, the NOTE is standing on its own without the context and is hence unclear. Appropriate text to provide context must also be provided. |
| Apple |  | Suggest to clarify that “the size limit of inter-Node signaling is 2560 octets." |
| CATT |  | The note should be located with relevant text. |
| LG |  | Apple’s suggestion looks good. |
| Huawei, HiSilicon | No | It’s not clear what the “size” refers to. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 3B**: TBD.

**Proposal 3B**: TBD.

# 4 NR-U

A CR on the NR-U deployment scenario was submitted in [R2-2103880](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103880.zip). The CR argues that the missing deployment scenario of carrier aggregation with NR in licensed spectrum as PSCell and NR in shared spectrum as SCell should be added in stage-2.

**Question 4A**: Do you agree with the intention of the CRs?

|  |  |  |
| --- | --- | --- |
| Answers to Question 3A | | |
| Company | Yes/No | Technical Arguments |
| OPPO | No | We normally do not specific DC operation in 38.300, instead it’s supposed to be captured in TS 37.340. |
| Nokia (rapporteur) | Maybe | We are fine with the intent but this was not checked with specification rapporteur beforehand. |
| Qualcomm Incorporated | Yes |  |
| Samsung | Yes |  |
| Intel |  | This deployment in TS38.300 is based on the WI objective and it is clear that this scenario is not one of the deployment scenarios. |
| Apple | Yes | Proponent.  The intention is to add the missing scenario, i.e. CA between NR in licensed spectrum as PSCell and NR in shared spectrum as SCell.  We are sorry not to ask spec rapporteur to check in advance. |
| CATT | No | Scenario A is aimed to CA scenario and in the last sentence, it is stated that “Carrier aggregation of cells in shared spectrum is applicable to all deployment scenarios.” So there is no ambiguity. |
| LG | Yes |  |
| Huawei, HiSilicon |  | If we are to support the scenario of “Carrier aggregation between NR in licensed spectrum (SpCell) and NR in shared spectrum (SCell)” as in the CR, it is then not about CA scenario but about a new DC scenario, where NR in licensed spectrum is PScell and NR in unlicensed spectrum would be Pcell. We are not sure this scenario needs to be supported. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 4A**: TBD.

**Proposal 4A**: TBD.

**Question 4B**: If you agree with the intention, are you happy with the wording or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 3B | | |
| Company | Yes/No | Possible Changes |
| Nokia (rapporteur) | No | The coversheet should be improved and such minor changes could be combined into one general CR. |
| Qualcomm Incorporated | Yes |  |
| Apple | Yes | Proponent. We are fine to combine it into rapporteur CR. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 4B**: TBD.

**Proposal 4B**: TBD.

# 5 IAB MT in SA mode

A CR on IAB MT in SA mode was submitted in [R2-2101478](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_113-e/Docs/R2-2101478.zip). The CR argues that the DRB establishment for IAB MT in SA mode is optional, and should be reflected in QoS description section of stage-2.

**Question 5A**: Do you agree with the intention of the CRs?

|  |  |  |
| --- | --- | --- |
| Answers to Question 4A | | |
| Company | Yes/No | Technical Arguments |
| Nokia (rapporteur) | Yes |  |
| Qualcomm Incorporated | Yes |  |
| Samsung | Yes |  |
| Intel | Yes | DRB is optional for IAB-MT in SA mode. |
| Apple | Yes |  |
| CATT | Yes |  |
| LG | Yes |  |
| Huawei, HiSilicon | Yes | The intention is correct. Perhaps the CR could be merged into a “bigger” one? |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 5A**: TBD.

**Proposal 5A**: TBD.

**Question 5B**: If you agree with the intention, are you happy with the wording or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 4B | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| Qualcomm Incorporated | Yes |  |
| Intel | Yes | some editorial changes: change “IAB MT” into “IAB-MT”. |
| Huawei, HiSilicon | Yes |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 5B**: TBD.

**Proposal 5B**: TBD.

# 6 2-step release with redirect without anchor change

Iin the past two RAN2 meeting for 2-step release with redirection, RAN2 made the following agreements:

|  |
| --- |
| * *RAN2#112e Agreement:*   + *Will support release with redirection in response to a ResumeRequest for both with/without anchor change cases.*   + *For anchor change scenario, the current gNB is responsible for determining the redirection.* * *RAN2#113e Agreement:*   + *Confirm the previous agreement to support the release with redirection in response to a ResumeRequest for both with/without anchor change cases.*   + *R2 assumes that the inter-node signaling and procedure impact can be up to NW implementation or left to RAN3 discussion.* |

The corresponding CRs capturing the above agreements are agreed in [R2-2102383](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113-e\Docs\R2-2102383.zip), [R2-2102384](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113-e\Docs\R2-2102384.zip) and [R2-2102385](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113-e\Docs\R2-2102385.zip). The tdoc [R2-2104208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104208.zip) argues that in RNAU without anchor change procedure, the dedicated reselection priority in cellReselectionPriorities and the deprioritisation configuration in deprioritisationReq are configured by the anchor gNB and provided to UE via an encapsulated RRCRelease message. Thus the 2-step release with redirection without anchor change case can reuse the same procedure with the following chapter proposed to be captured in 38.300 (**R2-2104209**):

9.2.2.x Resume request responded with Release with Redirect, without UE context relocation

The following figure describes a UE triggered NAS procedure responded by the network with a release with redirect, without UE context relocation.



Figure 9.2.2.X-1: Resume request responded with Release with Redirect, without UE Context relocation

1. The UE resumes from RRC\_INACTIVE, providing the I-RNTI allocated by the last serving gNB and appropriate cause value, e.g., RAN notification area update.

2. The gNB, if able to resolve the gNB identity contained in the I-RNTI, requests the last serving gNB to provide UE Context, providing the cause value received in step 1.

3. The last serving gNB stores received information to be used in the next resume attempt (e.g. C-RNTI and PCI related to the resumption cell), and responds to the gNB with the RETRIEVE UE CONTEXT FAILURE message including an encapsulated *RRCRelease* message. The *RRCRelease* message includes Suspend Indication and redirection information (the frequency layer the UE performs cell selection upon entering RRC\_INACTIVE).

4. The gNB forwards the *RRCRelease* message to the UE.

NOTE1: Upon receiving the release with redirect, the higher layers trigger a pending procedure so the UE tries to resume again after cell selection.

**Question 6A**: Do you agree with the intention of the following proposal?

For the release with redirection in response to a ResumeRequest with anchor change case:

* the anchor gNB is responsible for determining the redirection configuration;
* the redirection configuration will be transmitted from the anchor gNB to the serving gNB in an encapsulated RRCRelease message in RETRIEVE UE CONTEXT FAILURE message and forwarded from the serving gNB to UE afterwards.

Rapporteur’s Note: Company who has concerns on the detailed wording of the proposal can provide the suggested changes in the “Technical Arguments & Possible Changes” column.

|  |  |  |
| --- | --- | --- |
| Answers to Question 5A | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| OPPO | Yes | We tend to share the similar view with the CR proponent, i.e., no motivation to handle redirection information other than decided by anchor gNB. |
| Nokia, Nokia Shanghai Bell | No | We are wondering what is the difference to existing Figure 9.2.2.5-2 - that seems to be same case as the one in the CR? |
| Qualcomm Incorporated | Yes |  |
| Samsung | No | We think the current specification is clear enough. We don’t need to capture every details in the stage 2 specification especially if there is no room for misunderstanding |
| Intel |  | As previously agreed, this should be discussed in RAN3 |
| Apple | No | As discussed in last RAN2 meeting, it will up to NW implementation or leave it to RAN3 discussion. |
| ZTE(Yuan) | Yes, as the proponent | First to emphasize that the CR is for the 2-step release with redirect without anchor change case, it is not a CR for clarification but to add a case for the newly introduced TEL16 feature. To avoid misunderstanding, the changes in the CR (R2-2104209) has been reflected above.  We agreed in RAN2#112e to support both release with redirection in response to a ResumeRequest for both with/without anchor change cases while we only managed to agree on stage 2 CR for the release with redirection in response to a ResumeRequest with anchor change case at RAN2#113e. This CR is for the other case, i.e. without anchor change case, which has not been agreed on yet. |
| CATT |  | This should be depended on the understanding of RAN3. |
| LG | No | Should be discussed in RAN3. |
| Huawei, HiSilicon | Yes, but | We agree that the anchor gNB is responsible for determining the redirection configuration, but the issue is how the anchor gNB determines whether to release the UE and the redirection configuration and what information should be used by the anchor gNB. Only the serving gNB knows the traffic load or neighboring frequency but not the anchor gNB. We think this issue should be discussed first. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 6A**: TBD.

**Proposal 6A**: TBD.

The CR capturing the proposal provided in Question 6A was submitted in [R2-2104209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104209.zip).

**Question 6B**: If you agree with the intention of the proposal provided in Question 6A, are you happy with the stage-2 CR provided in [R2-2104209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104209.zip) or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 6B | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| Qualcomm Incorporated | Yes |  |
| ZTE(Yuan) | Yes |  |
| Huawei, HiSilicon |  | Please see our comments for Question 6A. Besides, the figure in the CR is not correct as it is not for “RNA Update” and the cause value is not “RAN notification area update”. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 6B**: TBD.

**Proposal 6B**: TBD.

The LS to RAN3 capturing the proposal provided in Question 6A was submitted in [R2-2104252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104252.zip).

**Question 6C**: Do you think the LS to inform RAN3 of the above RAN2 agreement on Question 6A is needed?

Rapporteur’s Note: Company who agrees on sending a LS to RAN3 can provide the suggested changes in the “Technical Arguments & Possible Changes” column.

|  |  |  |
| --- | --- | --- |
| Answers to Question 6C | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| Nokia, Nokia Shanghai Bell | No | see response to 6A |
| Qualcomm Incorporated | Yes |  |
| Apple | No | RAN3 can discussed based on RAN2 agreement directly. |
| ZTE(Yuan) | Yes | It would be good to inform RAN3 about our decision as the anchor node has to decide the redirection config and provide to the current node. |
| LG | No | RAN3 can discuss this issue directly. |
| Huawei, HiSilicon |  | Please see our comments for Question 6A. The issue mentioned in Question 6A should be discussed first, if companies think this issue can be discussed in RAN3, then we think it should be reflected in the LS. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 6C**: TBD.

**Proposal 6C**: TBD.

# 7 IP packet for IAB F1-C

A CR on IP packet for IAB F1-C was submitted in [R2-2103557](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2103557.zip). The CR argues that including the IP packets (without SCTP) to protect the traffic on the F1-C interface (e.g. IPSec and IKEv2 IP packets) as agreed in [R3-207068](http://3gpp.org/ftp/tsg_ran/WG3_Iu/TSGR3_110-e/Docs/R3-207068.zip) in RAN3#110-e is not reflected in the current TS37.340.

**Question 7A**: Do you agree with the intention of the CRs?

|  |  |  |
| --- | --- | --- |
| Answers to Question 4A | | |
| Company | Yes/No | Technical Arguments |
| Nokia, Nokia Shanghai Bell | Yes | Proponent. Currently, in RAN2 specifications there is no support for the IP packets used to protect traffic on the F1-C |
| Qualcomm Incorporated | Yes |  |
| Samsung | Yes |  |
| Intel | Yes | The intention is ok to cover other security protection options for F1-C, including IPsec ESP and IKEv2 . |
| Apple | Yes |  |
| ZTE | Yes |  |
| CATT | Yes |  |
| LG | Yes |  |
| Huawei, HiSilicon | Yes | The intention is correct. Perhaps the CR could be merged into a “bigger” one? |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 7A**: TBD.

**Proposal 7A**: TBD.

**Question 7B**: If you agree with the intention, are you happy with the wording or would you like to enhance it?

|  |  |  |
| --- | --- | --- |
| Answers to Question 4B | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| Nokia, Nokia Shanghai Bell | Yes | Proponent. Alternative way is to list explicitly the IP packets protecting the traffic on the F1-C interface (e.g. IPSec and IKEv2 IP packets) |
| Qualcomm Incorporated | Yes |  |
| Samsung | Yes |  |
| Intel | Yes |  |
| Apple | Yes |  |
| ZTE | Not sure | As agreed in [R3-207068](http://3gpp.org/ftp/tsg_ran/WG3_Iu/TSGR3_110-e/Docs/R3-207068.zip) in RAN3#110-e meeting, F1-C traffic transferred between MeNB and en-gNB contains an F1-C interface SCTP CHUNK and IP header, or an IP packet to protect the traffic on the F1-C interface as defined in TS 33.501. So could you please clarify the meaning of “ F1-C related SCTP packet” in this CR? |
| CATT | Yes |  |
| Huawei, HiSilicon | Yes |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 7B**: TBD.

**Proposal 7B**: TBD.

# 8 Miscellaneous corrections for 37.340

A CR on some miscellaneous corrections for 37.340 was submitted in [R2-2104015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104015.zip). The CR is to:

1. Add missing Rel-16 features of two-step RACH and intra-UE multiplexing.
2. Clarify that SCG failure information procedure can be supported for both SN change failure and SN addition failure cases.
3. Add some editorial changes.

**Question 8**: Do you agree on the CR [R2-2104015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_113bis-e\Docs\R2-2104015.zip)?

Rapporteur’s Note: Company who does not agree or partially agrees with the CR can provide the suggested changes in the “Technical Arguments & Possible Changes” column.

|  |  |  |
| --- | --- | --- |
| Answers to Question 8 | | |
| Company | Yes/No | Technical Arguments & Possible Changes |
| OPPO | Yes but | There is typo (an extra space after MN) on the following change:  In MR-DC, the UE may be configured with LCH based prioritization on MN , if the MN is a gNB (i.e. for NE-DC and NR-DC) and on SN, if the SN is a gNB (i.e. for EN-DC, NGEN-DC and NR-DC).  [ZTE, dong fei, [dong.fei@zte.com.cn]:](mailto:dong.fei@zte.com.cn]:) this will be fixed |
| Nokia, Nokia Shanghai Bell | Partly | Some comments per proposed change:   * C1: OK but the BH definition is already in 38.300, so not needed. * C2/C3: OK * C4: Intent is OK but there is an error in RRC message name (should be *MCGFailureInformation* if we refer to the exact name - the same error is already there in the existing text.) * C5: Not needed as the text preamble already makes it clear this is an example so need not be complete in all details.   [ZTE, dong fei, [dong.fei@zte.com.cn]:](mailto:dong.fei@zte.com.cn]:)  C1: Since we capture BH RLF in the text of TS 37.340, we think it is better to provide the definition of BH in Abbreviations for reference.  C4: OK. We will modify all “MCG Failure Information ” to “MCGFailureInformation” in section 7.7.  C5: It is no harm to complete all messages in order to make it more clear. |
| Qualcomm Incorporated | Yes, but | Not sure if the "LCH based prioritization" (the last change in section 6.1) is sufficiently clear if read in one year from now. |
| Samsung | Partly | Agree with Nokia that the changes need improvements |
| Intel | Yes |  |
| Apple | Yes |  |
| ZTE(Proponent) | Yes with the change | The above comments can be referred |
| CATT | Yes |  |
| LG | Yes, but | The last change, i.e. adding “or *RRCReconfiguration*, or *RRCRelease”*, is not needed. |
| Huawei, HiSilicon | Yes, but | The term of “LCH based prioritization” is not used in any other spec, so we may consider to align with 38.300 “enhanced intra-UE overlapping resources prioritization”. |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Summary 8**: TBD.

**Proposal 8**: TBD.

# 9 Conclusion

TBD

# Annex – Contact Points

Respondents to the email discussion are kindly asked to fill in the following table.

|  |  |  |
| --- | --- | --- |
| Company | Name | Email Address |
| Xiaomi (Rapporteur) | Yumin Wu | wuyumin@xiaomi.com |
| Lenovo | Hyung-Nam Choi | hchoi5@lenovo.com |
| Nokia (includes also 38.300 rapporteur where indicated) | Tero Henttonen | tero.henttonen@nokia.com |
| Intel | Sudeep Palat | Sudeep.k.palat@intel.com |
| Apple | Fangli XU | fangli\_xu@apple.com |
| CATT | Jing Liang | liangjing@catt.cn |
| Huawei, HiSilicon | Simone Provvedi | Simone.provvedi@huawei.com |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |