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

**Online, April 12th –20th, 2021**

Agenda Item: 6.1.4.1.1

Source: Fujitsu

Title: Report of [Offline-019][NR16] Connection Control

Document for: Discussion, Agreement

# 1 Introduction

This contribution is related to the following email discussion.

* [AT113bis-e][019][NR16] Connection Control (Fujitsu)

 Scope: Treat R2-2103209, R2-2103210, R2-2104247, R2-2104240, R2-2103280, R2-2103449, R2-2102854, R2-2104167, R2-2103937

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

 Intended outcome: Report and Agreed-in-principle CRs

 Deadline: Schedule A

# 2 Contact Information

|  |  |
| --- | --- |
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# 3 Discussion

## 3.1 Restriction on DCI format 0\_2/1\_2 for unlicensed band

[R2-2103209](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2103209.zip) CR on the configuration restriction on DCI format 0\_2/1\_2 for unlicensed band (Option 1) OPPO, Samsung, Xiaomi, ZTE, Apple, Intel CR Rel-16 38.331 16.4.1 2502 - F NR\_IIOT-Core, NR\_unlic-Core

[R2-2103210](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2103210.zip) CR on the UE capability restriction on DCI format 0\_2/1\_2 for unlicensed band (Option 2) OPPO, Samsung, Xiaomi CR Rel-16 38.306 16.4.0 0548 - F NR\_IIOT-Core, NR\_unlic-Core

Summary of Changes from the CRs:

* Option 1: In Section 6.3.2 of TS38.331, clarify DCI format 1\_2/0\_2 is not allowed for unlicensed band.
* Option 2: In Section 4.2.7.10 of TS38.306, clarify dci-Format1-2And0-2-r16 is not applied for unlicensed band.

Rapporteur opinion: The change is needed. Option 1 is slightly preferred.

**Do you agree with the intention of these CRs? If yes, which option do you prefer?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| Ericsson | No | Even though the CAPC field is not in the DCI format x\_2 in the Rel-16, it does not mean that the DCI format x\_2 cannot be used in the unlicensed band. 1. Not every UL transmission requires an LBT indication. Actually the UE needs to know the LBT category for an UL burst, so there can be cases where the UL is indicated with DCI x\_1. For later contiguous transmissions within the same burst, the UE is actually not performing any LBT so those in principle can be scheduled with a different DCI that does not indicate LBT.  See below PHY layer spec texts for more info,

If a UL grant scheduling a PUSCH transmission indicates Type 1 channel access procedures, the UE shall use Type 1 channel access procedures for transmitting transmissions including the PUSCH transmission unless stated otherwise in this clause. [….]If a UE is scheduled to transmit a set of  consecutive UL transmissions without gaps including PUSCH  using one or more UL grant(s), PUCCH using one or more DL grant(s), or SRS with one or more DL grant(s) or UL grant(s) and the UE transmits one of the scheduled UL transmissions in the set after accessing the channel according to one of Type 1, Type 2, Type 2A, Type 2B or Type 2C UL channel access procedures, the UE may continue transmission of the remaining UL transmissions in the set, if any. 1. The UE is scheduled using the DCI x\_2, and also received DCI 2\_0 that indicates COT sharing. With this combination, the LBT indication is according to the DCI 2\_0, regardless if the LBT is indicated by the scheduling grant or not.

Of course, the usage might be limited, e.g., if the UE is scheduled using DCI x\_2, and the LBT indication is not indicated by any other means, then the UE behavior may not be defined. The common understanding is that UE can do whatever it wants, and if it is a trouble for the network, then the network would not schedule in such a way. To summarize, there is no need to add this restrictions in the spec and it is up-to network implementation to ensure that the LBT indication (if needed) is conveyed to the UE by other means. |
| OPPO | Option 1 or 2 | As mentioned in the CRs, the feature of Rel-16 IIoT is designed only for licensed band, the design of DCI format 0\_2 and DCI format 1\_2 does not include channel access related field, e.g. ChannelAccess-CPext, which is necessary and thus the key field for DG for unlicensed band. Without this field, the UE is not sure how to access the channel on unlicensed band. One may argue that the UE can use the default CAPC field value defined in TS 38.300 to access the channel, even if CAPC is not indicated in the DCI. For the configured UL resource, we tend to agree the UE can do so, since Type 1 channel access is specified as the default channel access type for CG in TS 37.213. However, for DG, it is not unclear which channel access type is the default one, thus the UE does not know how to access the channel.Based on the above, if the UE receives DG with DCI format x\_2 for unlicensed band, the UE does not know how to access, e.g. whether to choose Type 1 channel access or Type 2 channel access, which introduces the unexpected/erroneous UE behavior.Actually, the issue on the support of DCI format x\_2 for unlicensed band in Rel-16 is already discussed in RAN1#104e meeting. Many companies in RAN1 agreed in Rel-17 to discuss the support of DCI format x\_2 for unlicensed band. In our understanding, it means the common understanding in RAN1 is no support of DCI format x\_2 for unlicensed band in Rel-16. Thus, what RAN2 needs to do is to capture this restriction. For convenience, I would like to list RAN1 progress on this issue for reference:- In RAN1#99, RAN1 has agreed not to leave DCI format x\_2 aside from shared spectrum channel access, i.e. DCI format should be enhanced to include e.g. channelaccess-CPext field. But, the related enhancement is unfortunately missing. - In RAN1#104e, it is proposed in P2 of R1-2100147 to modify TS 38.212 to align RAN1 spec and RAN1 agreement, but most companies tend to resolve the issue (i.e. to resolve the missing part mentioned above) in Rel-17. The related RAN1 discussion is in section 2.7 in the summary of [104-e-NR-NRU-02] Channel Access and with the link here<https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_104-e/Inbox/drafts/7.2.2/%5B104-e-NR-NRU-02%5D%20Channel%20Acces>Regarding the case mentioned by Ericsson, sometimes the UE can know how to access the channel, e.g. when DCI format x\_2 and format 2\_0 are jointly indicated to the UE. But, as Ericsson also indicated, the usage is very limited. In our understanding, it is not suitable for normal cases which are the ones we need to consider more. In my humble opinions, assuming the network allows the UE does whatever it wants when the UE is scheduled using DCI x\_2, I am not quite sure whether nothing is really broken. If that was the case, RAN1 will simply indicate DCI format x\_2 for unlicensed band is already supported in Rel-16, and there should be some place to say it depends on UE implementation other than not mention anything. On the other hand, the issue is clear and the change is essential, we do not think it is a good way to rely on gNB implementation to avoid such scheduling issue.In summary, this restriction should be captured in Rel-16 spec to avoid the related issues. Either Option 1 or Option 2 is fine to us.  |
| Samsung | 1 or 2 | It is true that neither RAN1 nor RAN2 considered the usage of DCI format 0\_2/1\_2 for licensed band. We don’t need to have such UE capability for licensed-only UE. UE shall not implement this feature for licensed band. |
| Qcom | 1 or 2  |  |
| Intel  | Option 1 | Agree |
| Huawei, HiSilicon | OK to address this, Option 2 is preferred | Since this is related to UE capabilities, we prefer to have this captured in TS 38.306, but there is no strong concern with option 1 from our side neither.  |
| CATT | Option 1 or no | We think the DCI formats description in 38.212 is enough. But if majority prefer revision on RAN2 spec, we can accept option 1. |
| ZTE (proponent) | Option 1 | Agree with the comments above from OppoAnd we think option 1 is enough to capture this. |
| Nokia | No  | We agree with Ericsson |
| vivo | 1 or 2 |  |
| Apple | 1 or 2 |  |
| MediaTek | Option 1 or 2 | Agree with Huawei that this is ideally capture in 38.306, but also ok with option 1 |
| Fujitsu | Option 1 | Option 1 is acceptable. |
| LG | 1 or 2 (1 is preferred) |  We think it is not desirable to make UE implement things for the cases that are not really expected. So, we think the restriction should be there.  |

**Summary:**

Based on the inputs, it seems that the restriction on DCI format 0\_2/1\_2 for unlicensed band can be achieved in spec. 11 companies agree with the intention of these CRs, 2 companies think that there is no need to add this restrictions in the spec and it is up to network implementation, and 1 company thinks that DCI formats description in 38.212 is enough.

In addition, 12 companies can accept Option 1 while 8 companies can accept Option 2. Therefore, the rapporteur proposes to pursue the changes in [R2-2103209](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2103209.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2103209.zip) (Option 1) in Phase 2.

**Proposal 1: Changes in [R2-2103209](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2103209.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2103209.zip) are pursued in Phase-2.**

## 3.2 Correction on releasing referenceTimePreferenceReporting and sl-AssistanceConfigNR

[R2-2104247](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2104247.zip) Correction on releasing referenceTimePreferenceReporting and sl-AssistanceConfigNR     Google Inc.  CR  Rel-16 38.331   16.4.1    2562      -      F     5G\_V2X\_NRSL-Core, NR\_IIOT-Core

Summary of Changes from the CR:

If the selected cell is not a CHO candicated cell, the UE releases *referenceTimePreferenceReporting* and *sl-AssistanceConfigNR*.

Rapporteur opinion: The change seems acceptable.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| Ericsson (Tony) | Yes | Changes looks ok, even if not super essential. |
| OPPO | No strong view | Change seems correct, but may not be very essential. |
| Samsung | Yes | Trivial correction for missing part. |
| Intel | Yes |  |
| Huawei, HiSilicon | Yes | It makes sense to correct this as currently the UE behavior is indeed inconsistent with the case where CHO is not configured. |
| CATT | Yes |  |
| Apple | Yes |  |
| MediaTek | Yes | This is consistent with the rest of the specification |
| Fujitsu  | Yes |  |
| LG | Yes | Even if the changes are not essential, we think they are beneficial to make 331 more consistent and accurate.  |
|  |  |  |

**Summary:**

According to the replies, 9 companies support the CR and 1 has no strong view. So, the rapporteur propose to pursure this to make the specification more consistent.

**Proposal 2: Changes in [R2-2104247](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2104247.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2104247.zip) are agreed.**

## 3.3 Correction on description of subCarrierSpacing in BWP

[R2-2104240](file:///D%3A%5C%5CDocuments%5C%5C3GPP%5C%5Ctsg_ran%5C%5CWG2%5C%5CTSGR2_113bis-e%5C%5CDocs%5C%5CR2-2104240.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2104240.zip) Correction on description of subCarrierSpacing in BWP Fujitsu, Samsung CR Rel-16 38.331 16.4.1 2561 - F NR\_unlic-Core

Summary of Changes from the CR:

The description of *subCarrierSpacing* in *BWP* is changed into: Subcarrier spacing to be used in this BWP for all channels and reference signals unless explicitly configured elsewhere. Corresponds to subcarrier spacing according to TS 38.211 [16], table 4.2-1. The value *kHz15* corresponds to µ=0, value *kHz30* corresponds to µ=1, and so on. Only the values 15 kHz, 30 kHz, or 60 kHz (FR1), and 60 kHz or 120 kHz (FR2) are applicable. For the initial DL BWP this field has the same value as the field *subCarrierSpacingCommon* in *MIB* of the same serving cell for operation in licensed spectrum, and has the value corresponding to the subcarrier spacing of the SSB associated to the initial DL BWP for operation with shared spectrum channel access.

Rapporteur opinion: The change is essential and needed.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| Samsung | Yes | proponent |
| **Ericsson** | Yes, with comments | The change should be added to be properly aligned with the field description of *subCarrierSpacingCommon* in MIB. For better readability and in accordance with other field descriptions, “for operation [in licensed spectrum / with shared spectrum channel access] should be added at the beginning of each sentence as follows:For the initial DL BWP and operation in licensed spectrum this field has the same value as the field *subCarrierSpacingCommon* in *MIB* of the same serving cell. For operation with shared spectrum channel access, the value of this field corresponds to the subcarrier spacing of the SSB associated to the initial DL BWP. |
| Huawei, HiSilicon | Yes |  |
| **ZTE** | Yes | Agree with the Rapporteur. |
| Nokia | Yes, to the general intention (title) of the CR, but | Maybe we could simplify the wording a bit. Now it is bit complex but we think there is no need to say that SCS is based on initial BWP but just directly say that value corresponds to the SCS of initial BWP “..*subCarrierSpacingCommon* in *MIB* of the same serving cell for operation in licensed spectrum, and has the value corresponding to the subcarrier spacing of the ~~SSB associated to the~~ initial DL BWP for operation with shared spectrum channel access.” |
| Apple | Yes | Ericsson’s change looks fine. |
| MediaTek | Yes, with comments | Agree with Ericsson’s changes. This is aligned with the description already present in MIB. |
| Fujitsu | Yes | Proponent.  |
| LG | Yes | This change seems correct and necessary. |
|  |  |  |

**Summary:**

Based on the comments in this question, all companies agree with the intention of the CR. Further, 5 companies are fine with the changes in the CR, 3 companies think that revision is needed for better readability, and 1 company suggests to delete “SSB associated to the” for simplicity. Therefore, the rapporteur proposes to pursue it with some modifications at least for better readability.

**Proposal 3: Changes in R2-2104240 are pursued in Phase-2, with modifications as below.**

For the initial DL BWP and operation in licensed spectrum this field has the same value as the field *subCarrierSpacingCommon* in *MIB* of the same serving cell. For the initial DL BWP and operation with shared spectrum channel access, the value of this field corresponds to the subcarrier spacing of the SSB associated to the initial DL BWP.

## 3.4 Correction on description of ssb-PositionsInBurst in ServingCellConfigCommonSIB

[R2-2103280](file:///D%3A%5C%5CDocuments%5C%5C3GPP%5C%5Ctsg_ran%5C%5CWG2%5C%5CTSGR2_113bis-e%5C%5CDocs%5C%5CR2-2103280.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2103280.zip) Correction on description of ssb-PositionsInBurst in ServingCellConfigCommonSIB Fujitsu CR Rel-16 38.331 16.4.1 2505 - F NR\_unlic-Core

Summary of Changes from the CR:

Remove ‘only *mediumBitmap* is used’ in description of *ssb-PositionsInBurst* in *ServingCellConfigCommonSIB*

Rapporteur opinion: The change is editorial and acceptable. Additionally, for easy reading, maybe the description could be re-constructed as follows:

|  |
| --- |
| ***ssb-PositionsInBurst***Time domain positions of the transmitted SS-blocks in an SS-burst as defined in TS 38.213 [13], clause 4.1. For operation with shared spectrum channel access, only *inOneGroup* is used and the UE interprets this field same as *mediumBitmap* in *ServingCellConfigCommon*. The UE assumes that a bit at position k > $N\_{SSB}^{QCL}$ is 0, where $N\_{SSB}^{QCL}$ is obtained from MIB as specified in TS 38.213 [13], clause 4.1. |

**Do you agree with the intention of this CR? If yes, do you agree with the above changes suggested by the Rapporteur?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **Samsung** | **Yes** |  |
| **Ericsson** | **Yes, with comments** | Indeed, there is no *mediumBitmap* in *ssb-PositionsInBurst* of the IE *ServingCellConfigCommonSIB*. k > $N\_{SSB}^{QCL}$ is used for *ServingCellConfigCommonSIB*, while for *ServingCellConfigCommon*, we have k > ssb-PositionQCL. So we should add a “but” before the last sentence and align the wording with that in *ServingCellConfigCommon* as follows:“[…] the UE interprets this field same as *mediumBitmap* in *ServingCellConfigCommon*, but the k-th bit is set to 0 for k > $N\_{SSB}^{QCL}$, where $N\_{SSB}^{QCL}$ is obtained from MIB as specified in TS 38.213 [13], clause 4.1.” |
| **Intel** | Yes | Agree with the rapporteur change |
| Huawei, HiSilicon | Yes | The text as proposed by the rapporteur above looks OK to us. |
| **ZTE** | **Yes** | Agree with the Rapporteur. |
| Nokia | Yes | We consider this change as editorial, could be also included in the rapporteur CR |
| vivo | Yes | Fine with Rapporteur suggestion. |
| Apple | Yes |  |
| MediaTek | Yes | We agree with the rapporteur |
| Fujitsu | Yes | Proponent. Fine with Rapporteur and Ericsson’s revision.  |
| LG | Yes | This change seems correct and necessary. |
|  |  |  |

**Summary:**

Based on the replies, all companies agree with the intention of the CR. Further, 10 companies are fine with the rapporteur change while 1 company suggests some modifications. Therefore, the rapporteur propose to pursues it in Phase-2.

**Proposal 4: Changes in R2-2103280 are pursued in Phase-2. Take the Rapporteur’s revison as baseline.**

## 3.5 Correction on freqMonitorLocations

[R2-2103449](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2103449.zip) Correction on freqMonitorLocations ASUSTeK CR Rel-16 38.331 16.4.1 2508 - F NR\_unlic-Core

Summary of Changes from the CR:

Change least significant bit in field description of *freqMonitorLocations* to most significant bit.

Rapporteur opinion: The change is for alignment with TS 38.213. It is acceptable.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| Samsung | Yes | The proposed change is aligned with TS 38.213. |
| **Ericsson** | **Yes** | Even though “MSB k” is not obvious, this would be clear from the corresponding RAN1#99 agreement:“Within the *SearchSpace* IE, the agreed RRC parameter freqMonitorLocations-r16 provides a bitmap (where the first bit in the bitmap corresponds to the first RB set in the BWP, and the second bit corresponds to the second RB set, and so on).” |
| Qcom | Yes | This alignment is needed |
| Intel | Yes |  |
| ASUSTeK | Yes | The field descrption needs to be fixed in order to align with RAN1 specifciation. |
| Huawei, HiSilicon | Yes | We agree “MSB k” structure is not very clear, but it seems RAN1 uses this as “the kth bit counting from the MSB”. In that case, the proposed change is correct. |
| CATT | Yes |  |
| **ZTE** | **Yes** |  |
| **Nokia** | **Yes** |  |
| **vivo** | **Yes** |  |
| Apple | Yes |  |
| Fujitsu  | Yes |  |
| LG | Yes | This is a necessary correction  |
|  |  |  |

**Summary:**

According to the inputs from companies, the changes in the CR can be agreed.

**Proposal 5: Changes in R2-2103449 are agreed.**

## 3.6 Correction on repetition for L1-SINR

[R2-2102854](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2102854.zip) Correction on repetition for L1-SINR vivo draftCR Rel-16 38.331 16.4.1 F NR\_eMIMO-Core

Summary of Changes from the CR:

In the field description of *repetition* in *NZP-CSI-RS-ResourceSet*, update the field description that the repetition could be also configured for CSI-RS resource sets with report of L1 SINR.

Rapporteur opinion: The change seems acceptable.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| **Ericsson** | **yes** |  |
| Samsung | Yes |  |
| Qcom  | Yes |  |
| Intel | Yes |  |
| Huawei, HiSilicon | Yes |  |
| CATT | Yes |  |
| **ZTE** | **Yes** |  |
| Nokia | Yes, but | We agree with the intent but it would be better to use the exact ENUM values in the text (also for the legacy text) to avoid ambiguities |
| vivo | Yes | Proponent |
| Apple | Yes |  |
| Fujitsu  | Yes |  |
| LG | Yes |  |
|  |  |  |

**Summary:**

According to the replies, almost all companies agree with the changes in this CR except 1 company suggest the exact ENUM values in the text to avoid ambiguities. The repportur thinks that the changes in the CR is sufficient and propose to agree it.

**Proposal 6: Changes in R2-2102854 are agreed.**

## 3.7 Miscellaenous corrections on BH RLC channel management for IAB-MT

[R2-2104167](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2104167.zip) Miscellaenous corrections on BH RLC channel management for IAB-MT Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2557 - F NR\_IAB-Core

Summary of Changes from the CR:

1. Based on the received *CellGroupConfig* IE which contains the *spCellConfig* with *reconfigurationWithSync*, IAB-MT will resume BH RLC channels, if suspended.
2. Upon the initiation of the RRC re-establishment, suspend BH RLC channels and BAP entity at IAB-MT.
3. Editorial changes for *IABOtherInformation-IEs* field descriptions. For *iab-IPv4-AddressReport*: This field is used to report the IPv4 address per specific usage assigned by OAM for IAB-DU; for *iab-IPv6-AddressReport*: This field is used to report the IPv6 address per specific usage assigned by OAM for IAB-DU.
4. Editorial change for *all-Traffic-IAB-IP-Address* in *IAB-IP-AddressAndTraffic-IEs field descriptions:* This field is used to report to IAB-donor-CU the IP address(es) or IPv6 address prefix for all traffic.
5. Extend the *LogicalChaneelIdentity* IE description for BH RLC channel: The IE *LogicalChannelIdentity* is used to identify one logical channel (*LogicalChannelConfig*) and the corresponding RLC bearer (*RLC-BearerConfig*) or BH RLC channel (*BH-RLC-ChannelConfig*).

Rapporteur opinion: The changes all look acceptable.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| Samsung | OK with changes 3 -5 | With regards to Change no. 1, this requires further confirmation (whether resume behaviour should also apply to BH RLC channel for the case of IAB-MT). Additionally, it may be confusing to say ‘resume … for all radio bearers and BH RLC channels’, when the two cases (radio bearers; BH channels) refer to different scenarios – radio bearers to a “normal” UE, and BH channels to an IAB-MT (UE radio bearers are not exposed to an IAB-MT, they are payload of BAP packets).Similar comment for Change no. 2. |
| Ericsson | Ok to changes 3-5 | Agree with Samsung analysis on change 1-2. |
| Qcom | Yes | All 4 points in this CR make sense |
| Intel | Yes |  |
| Huawei, HiSilicon | Yes | Proponent. We think we need a way to address suspend/resume of BH RLC channels as well. We can provide a revision to address Samsung’s concern, i.e. to make it clear that BH RLC channels refer to IAB-MT and bearers to the UE. |
| CATT | Yes |  |
| Nokia | OK with changes 3-5 | On #1: The intention seems fine but the proposed text "and resume SCG transmission for all radio bearers and BH RLC channels, if suspended" makes it specific to SCG, which does not seem to match the intention.On #2: This seems to assume a specific BAP implementation. What if the BAP entity is shared between MT and DU part? We think the BAP-entity part can be left to implementation. |
| vivo | yes |  |
| Apple | Yes |  |
| Fujitsu  | Yes  |  |
| LG | Yes | All changes are correct and necessary.  |
|  |  |  |

**Summary:**

Based on the replies, all companies agree with the changes 3-5 proposed in this CR.

Regarding the 1st change, 8 companies are fine, 2 companies have doubt on IAB-MT case, and 1 company is fine with the intention but thinks that the change is not aligned with the intention.

Regarding the 2nd change, 8 companies are fine, 2 companies have doubt on IAB-MT case, and 1 company thinks that BAP entity part can be left to implementation.

Therefore, the changes in this CR is pursued in Phase-2 taking these comments into acount.

**Proposal 7: Changes in R2-2104240 are pursued in Phase-2**

* **The changes 3-5 are agreed;**
* **Revise the change 1 and 2.**

## 3.8 Clarification to BAP address field description in the BAP-RoutingID IE

[R2-2103937](file:///D%3A%5C%5CDocuments%5C%5C3GPP%5C%5Ctsg_ran%5C%5CWG2%5C%5CTSGR2_113bis-e%5C%5CDocs%5C%5CR2-2103937.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2103937.zip) Clarification to BAP address field description in the BAP-RoutingID IE Ericsson CR Rel-16 38.331 16.4.1 2542 - F NR\_IAB-Core

Summary of Changes from the CR:

1. In the field description of the *BAP-Address* IE included in the *UL BAP-RoutingID* IE, remove “destination IAB-node” from “The ID of a destination IAB-node or IAB-donor-DU used in the BAP header”.

Rapporteur opinion: The change is unnecessary. Current text is a generic description of how BAP routing ID is defined.

**Do you agree with the changes proposed in this CR?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| Samsung | Yes | Change is correct (although perhaps not essential - nothing is broken). With regards to the comment from the rapporteur about this being a generic description of the BAP routing ID – this particular routing ID is configured for a node and is only used for the UL and therefore destination is always a Donor-DU, so the change is correct (for Rel-16). |
| Ericsson | Yes | As Samsung is pointing out, it is not ok to have a generic description of BAP-Address in this specific case. That field description only applies to the BAP-Address in UL BAP-RoutingID IE, and hence it should only represent the UL configuration. So without removing “destination IAB node”, it seems that the BAP address is also applicable to the downstream configuration which is clearly wrong. |
| Qcom | No | The original version of the description is technically correct! **We should not change it!**the ID is used for IAB-nodes in other documents, e.g. 38.473. Having a reference to IAB-donor-DU may create confusion. If we wanted to do some correction, we should change the description of defaultUL-BAP-RoutingID-r16 in the RRCReconfiguration message, instead. Please feel free to propose such a CR in the next meeting. |
| Intel | Agree | We agree with the intention of this change. Currently, the BAP-RoutingID is only used for defaultUL-BAP-RoutingID-r16. The BAP-Address IE in this field can only be BAP address of an IAB-donor-DU. Hence, we agree to remove “destination IAB node” in this field description. |
| Huawei, HiSilicon | CR seems not essential | This is rather a text improvement in our opinion. Even though the CR is technically correct, nothing seems broken in the current text. |
| CATT | No | we think current spec is OK. |
| Nokia | No | We agree with the rapporteur that the proposed change risks confusion about the definition of BAP routing ID. Because the name of the IE in question is the generic *BAP-RoutingID*, we should not adopt this change.If a majority of companies think that some clarification is needed then instead of the proposed change, we would prefer adding, in the same tabular description as the proposed change, the new sentence “In defaultUL-BAP-RoutingID, only IAB-donor-DU applies.” |
| vivo | No strong view | For 38.331, the BAP-RoutingID is only used to define defaultUL-BAP-RoutingID and the change is correct for 38.331. However, we have also observed that it does no harm if we keep as it is.As Qualcomm has pointed out, this term is used in 38.473 to refer to the BAP address for access IAB nodes and IAB donor-DU for providing BAP routing configuration to IAB nodes. So the change may cause some confusions between 38.331 and 38.473.  |
| Apple | No strong view. |  |
| Fujitsu  | No  |  |
| LG | No | We understand the intention. But,for the same reason as the motivation of this CR, there is no risk of confusion in the current text, since this IE is only used for configuring default BAP routing ID.  |
|  |  |  |

**Summary:**

Based on the inputs from companies, no clear majority if the changes in this CR are agreed. 3 companies support it, 6 companies thinks that nothing is broken in current text and 2 companies have no strong view.

Due to limited support, the rapporteur propose not to pursue it in Phase-2.

**Proposal 8: Changes in R2-2104240 are not pursued in Phase-2.**

# 4 Conclusion

Based on the companies’ replies, the following proposals are provided:

**Proposal 1: Changes in [R2-2103209](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2103209.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2103209.zip) are pursued in Phase-2.**

**Proposal 2: Changes in [R2-2104247](file:///D%3A/Documents/3GPP/tsg_ran/WG2/TSGR2_113bis-e/Docs/R2-2104247.zip%22%20%5Co%20%22D%3ADocuments3GPPtsg_ranWG2TSGR2_113bis-eDocsR2-2104247.zip) are agreed.**

**Proposal 3: Changes in R2-2104240 are pursued in Phase-2, with modifications as below.**

For the initial DL BWP and operation in licensed spectrum this field has the same value as the field *subCarrierSpacingCommon* in *MIB* of the same serving cell. For the initial DL BWP and operation with shared spectrum channel access, the value of this field corresponds to the subcarrier spacing of the SSB associated to the initial DL BWP.

**Proposal 4: Changes in R2-2103280 are pursued in Phase-2. Take the Rapporteur’s revison as baseline.**

**Proposal 5: Changes in R2-2103449 are agreed.**

**Proposal 6: Changes in R2-2102854 are agreed.**

**Proposal 7: Changes in R2-2104240 are pursued in Phase-2**

* **The changes 3-5 are agreed;**
* **Revise the change 1 and 2.**

**Proposal 8: Changes in R2-2104240 are not pursued in Phase-2.**