**3GPP TSG-RAN WG4 Meeting # 99-e R4-2111XXX**

**Electronic Meeting, 19th – 27th May 2021**

**Agenda item: 8**.38

**Source:** Moderator (Huawei)

**Title:** Email discussion summary for [99-e][129] NR\_UE\_PC2\_R17\_CADC\_SUL\_xBDL\_yBUL

**Document for:** Information

# Introduction

*Briefly introduce background, the scope of this email discussion (e.g. list of treated agenda items) and provide some guidelines for email discussion if necessary.*

*List of candidate target of email discussion for 1st round and 2nd round*

* 1st round: TBA
* 2nd round: TBA

In this email thread, AI 8.38 Rel-17 Power Class 2 UE for NR inter-band CA and SUL configurations with x (x>2) bands DL and y (y=1, 2) bands UL is discussed. The topics are divided into:

1. Rapporteur Input
2. TP to the TR

# Topic #1: Rapporteur Input

*Main technical topic overview. The structure can be done based on sub-agenda basis.*

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4- 2111422 | Huawei, HiSilicon | Editorial changes to the TR 38.842. |
| R4- 2111292 | Huawei, HiSilicon | The WID is revised to include:   * Add NR-NR DC to the scope * Add the upper bound for the number of DL bands * Add related work items |

## Open issues summary

*Before e-Meeting, moderators shall summarize list of open issues, candidate options and possible WF (if applicable) based on companies’ contributions.*

### Sub-topic 1-1 Draft TR

**Issue 1-1: Draft TR**

* Recommended WF
  + Collect comments and approve by email

### Sub-topic 1-2 Revised WID

**Issue 1-2: Revised WID**

* Recommended WF
  + Collect comments

## Companies views’ collection for 1st round

### Open issues

*One of the two formats, i.e. either example 1 or 2 can be used by moderators.*

**Issue 1-1: Draft TR**

* Recommended WF
  + Collect comments and approve by email

|  |  |
| --- | --- |
| **Company** | **Comments** |
| XXX |  |

**Issue 1-2: Revised WID**

* Recommended WF
  + Collect comments

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Qualcomm | This WID revision is increasing the scope of the work item to include NR-DC in addition to UL CA. This is a decision that can only be made at RAN plenary, so RAN4 cannot endorse this WID revision. On another note, there are no NR-DC combinations listed in this WID. |
| Huawei | In terms of RF requirements, there’re no fundamental differences between NR-DC and NR-CA. Hence there’re no need to have a separate WI for PC2 NR-DC. I don’t see any technical concern that stops RAN4 from endorsing the revision. And new PC2 NR-DC combos can be added later. |

### CRs/TPs comments collection

*For close-to-finalize WIs and maintenance work, comments collections can be arranged for TPs and CRs. For ongoing WIs, suggest to focus on open issues discussion on 1st round.*

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| XXX | Company A |
| Company B |
|  |
| YYY | Company A |
| Company B |
|  |

## Summary for 1st round

### Open issues

*Moderator tries to summarize discussion status for 1st round, list all the identified open issues and tentative agreements or candidate options and suggestion for 2nd round i.e. WF assignment.*

|  |  |
| --- | --- |
|  | **Status summary** |
| **Sub-topic #1-1** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |
| **Sub-topic #1-2** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |

### CRs/TPs

*Moderator tries to summarize discussion status for 1st round and provides recommendation on CRs/TPs Status update*

*Note: The tdoc decisions shall be provided in Section 3 and this table is optional in case moderators would like to provide additional information.*

|  |  |
| --- | --- |
| **CR/TP number** | **CRs/TPs Status update recommendation** |
| XXX | *Based on 1st round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

## Discussion on 2nd round (if applicable)

# Topic #2: TP to the TR

*Main technical topic overview. The structure can be done based on sub-agenda basis.*

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2111420 | Huawei, HiSilicon | TP for CA\_n1-n3-n78 PC2  [Moderator]: please comment in the TP section. |

## Open issues summary

*Before e-Meeting, moderators shall summarize list of open issues, candidate options and possible WF (if applicable) based on companies’ contributions.*

### Sub-topic 2-1 BCS for PC2 CA

*Sub-topic description: The bandwidth combinations sets (BCS) have been included in the PC2 CA configurations, e.g. TR 38.841 and TR 38.842. If the consistency is not maintained, the BCS configuration could become power class dependent. Companies are encouraged to share their views on how BCS should be defined for PC2 CA.*

*Open issues and candidate options before e-meeting:*

**Issue 2-1: BCS for PC2 CA**

* Proposals
  + Option 1: Define BCS for PC2 CA
  + Option 2: Reuse PC3 BCS for PC2 CA and no need to include BCS in PC2 Configurations.
  + Option 3: other suggestions
* Recommended WF
  + Collect comments

## Companies views’ collection for 1st round

### Open issues

**Issue 2-1: BCS for PC2 CA**

* Proposals
  + Option 1: Define BCS for PC2 CA
  + Option 2: Reuse PC3 BCS for PC2 CA and no need to include BCS in PC2 Configurations.
  + Option 3: other suggestions
* Recommended WF
  + Collect comments

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Nokia | Close to Option 2 but not sure if we can say that “reuse PC3 BCS” since so far BCS is PC independent. Better to check the RAN4 signaling and discuss this in the next meeting. At least all the channel bandwidth combinations supported by PC2 for a certain configuration shall be supported by the corresponding PC3 configurations by the same UE. |
| ZTE | Similar view with Nokia. Need to check the signaling, it seems not clear if there are problem in the case of different BCS are supported for PC2 and PC3, especially PC2 band combination can be fallback to PC3.  Also we think this issue is not only for this WID, but also for 2DL band PC2 NR CAWID. |
| CHTTL | Similar view as Nokia. And as the default PC is PC3, we are wondering whether there is the case that want to define a BCS only for PC2 but not for PC3, probably there will have some issues if do so. |
| Huawei | Agree to check signaling and other potential impact. |

### CRs/TPs comments collection

*Major close to finalize WIs and Rel-15 maintenance, comments collections can be arranged for TPs and CRs. For Rel-16 on-going WIs, suggest to focus on open issues discussion on 1st round.*

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2111420  TP for CA\_n1-n3-n78 PC2 | Company A |
| Company B |
|  |
| YYY | Company A |
| Company B |
|  |

## Summary for 1st round

### Open issues

*Moderator tries to summarize discussion status for 1st round, list all the identified open issues and tentative agreements or candidate options and suggestion for 2nd round i.e. WF assignment.*

|  |  |
| --- | --- |
|  | **Status summary** |
| **Sub-topic#1** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |

### CRs/TPs

*Moderator tries to summarize discussion status for 1st round and provided recommendation on CRs/TPs Status update suggestion*

|  |  |
| --- | --- |
| **CR/TP number** | **CRs/TPs Status update recommendation** |
| XXX | *Based on 1st round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

## Discussion on 2nd round (if applicable)

*Moderator can provide summary of 2nd round here. Note that recommended decisions on tdocs should be provided in the section titled ”Recommendations for Tdocs”.*

# Recommendations for Tdocs

## 1st round

**New tdocs**

|  |  |  |
| --- | --- | --- |
| **Title** | **Source** | **Comments** |
| WF on … | YYY |  |
| LS on … | ZZZ | To: RAN\_X; Cc: RAN\_Y |
|  |  |  |

**Existing tdocs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tdoc number** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-210xxxx | CR on … | XXX | Agreeable, Revised, Merged, Postponed, Not Pursued |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Notes:

1. Please include the summary of recommendations for all tdocs across all sub-topics incl. existing and new tdocs.
2. For the Recommendation column please include one of the following:
   1. CRs/TPs: Agreeable, Revised, Merged, Postponed, Not Pursued
   2. Other documents: Agreeable, Revised, Noted
3. For new LS documents, please include information on To/Cc WGs in the comments column
4. Do not include hyper-links in the documents

## 2nd round

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tdoc number** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-210xxxx | CR on … | XXX | Agreeable, Revised, Merged, Postponed, Not Pursued |  |
| R4-210xxxx | WF on … | YYY | Agreeable, Revised, Noted |  |
| R4-210xxxx | LS on … | ZZZ | Agreeable, Revised, Noted |  |
|  |  |  |  |  |

Notes:

1. Please include the summary of recommendations for all tdocs across all sub-topics.
2. For the Recommendation column please include one of the following:
   1. CRs/TPs: Agreeable, Revised, Merged, Postponed, Not Pursued
   2. Other documents: Agreeable, Revised, Noted
3. Do not include hyper-links in the documents