**3GPP TSG-RAN WG4 Meeting # 102-e R4-2206432**

**Electronic Meeting, February 21 – March 3, 2022**

**Agenda item:** 10.15.4

**Source:** Moderator (Huawei, HiSilicon)

**Title:** Email discussion summary for [102-e][132] NRSL\_enh\_Part\_3

**Document for:** Information

# Introduction

This email thread discuss Rel-17 PC2 HPUE for NR sidelink enhancements. The contributions are in agenda 6.15.4, which includes:

* Topic #1: Pcmax definition on inter-band V2X UE
* Topic #2: Co-existence study

# Topic #1: Pcmax definition for inter-band V2X UE

## Companies’ contributions summary

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| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2205582 | Huawei, HiSilicon | On configured output power for NR SL inter-band con-current operation  ***Observation 1: Lifting the power class limit for licensed inter-band combinations as an option is also under discussion.***  ***Proposal 1: No change for NR V2X Pcmax definition for Rel-17 inter-band con-current operation.***  ***Proposal 2: If study outcome of WI Power\_Limit\_CA\_DC for licensed bands has any impact to the existing requirements for inter-band con-current operation, the requirements can be further revisited in future release.*** |
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## Open issues summary

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

### Issue 1-1: Pcmax definition for inter-band V2X UE

***Whether to keep the existing Pcmax definition for inter-band con-current operation***

* ***Proposal 1: No change for NR V2X Pcmax definition for Rel-17 inter-band con-current operation.***
* ***Proposal 2: If study outcome of WI Power\_Limit\_CA\_DC for licensed bands has any impact to the existing requirements for inter-band con-current operation, the requirements can be further revisited in future release.***

***Moderator’s recommendation:***

* Recommended WF
  + Discuss whether the proposals are agreeable

GTW discussion:

Discussion:

Huawei: we can only agree on proposal 1. We won’t have any change for the requirement for existing band combo.

Agreement: No change for NR V2X Pcmax definition for Rel-17 inter-band con-current operation.

## Companies views’ collection for 1st round

### Open issues

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| --- | --- |
| **Issues** | **Company Comments** |
| Issue 1-1 | ***Whether to keep the existing Pcmax definition for inter-band con-current operation***  CATT: Support the above proposals.  Huawei: Prefer stop further discussion on the issue. At least for inter-band con-current operation, power control should be considered independently due to the implementation complexity. In addition, if power restriction of inter-band CA is lifted later, there is no reason we need to consider that to SL, we can further check the conclusion of the discussion for CA.  LGE: we are fine with those proposal from moderators. One remarkable point is that NR Uu + NR SL in licensed band, the power limitation will be restricted by per-band combinations. The upper limitation will be restricted by the regulatory requirements per each band.  Xiaomi: Agree with Huawei comment that if the power limit is lifted, still we don’t see the influence on SL since there is no upper limit. |
| QCOM | ***Proposal 1: No change for NR V2X Pcmax definition for Rel-17 inter-band con-current operation.***  We don’t think having a proposal 2 related another WI is helpful. If the other WI experts conclude a change is needed they will take the appropriate action. |
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## 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.*

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| --- | --- |
|  | **Status summary** |
| Issue 1-1 | Based on comments made in 1st round and discussion in GTW. We made the following agreement and no discussion is needed for 2nd round.  Agreement: No change for NR V2X Pcmax definition for Rel-17 inter-band con-current operation. |

## Discussion on 2nd round (if applicable)

None

# Topic #2: Co-existence study

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

## Companies’ contributions summary

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| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2205134 | Xiaomi | TP to TR 38.785 on the co-channel co-existence issue |
| R4-2205538 | Ericsson | TP for Co-channel existing |
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## Open issues summary

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

### Issue 2-1: TP to TR 38.785 on the co-channel co-existence

***Moderator’s recommendation:***

* Recommended WF
  + Comments collection on the two TPs on 1st round discussion

## Companies views’ collection for 1st round

### CRs/TPs comments collection

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| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2205134 | Huawei: A merged version with R4-2205538 is preferred. |
| QCOM: We agree with Huawei. The proponents should work together to try to arrive at a merged version. |
| LGE: RAN4 shall add the co-channel coexistence issues do not solved by RAN4 RF requirements. It shall be further discussed and addressed in RAN1 and other WG. We are fine to merge the contents. |
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| R4-2205538 | LGE: same comments in R4-2205134 |
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## 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.*

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| --- | --- |
|  | **Status summary** |
| Issue 2-1 | TP to TR 38.785 on the co-channel co-existence  Based on 1st round discusion, it is proposed the proponents to work together on a merged version on 2nd round. |

## Discussion on 2nd round

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| **Issues** | **Company Comments** |
| TP to TR 38.785 on the co-channel co-existence issue | Company A:  Company B: |
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## Summary on 2nd round (if applicable)

*Moderator tries to summarize discussion status for 2nd round and provided recommendation on CRs/TPs/WFs/LSs Status update suggestion*

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| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation** |
| R4-2206532 | No comment from 2nd round discussion  Agreeable |

# Recommendations for Tdocs

## 1st round

**New tdocs**

|  |  |  |
| --- | --- | --- |
| **Title** | **Source** | **Comments** |
| TP to TR 38.785 on the co-channel co-existence issue | Xiaomi, Ericsson | Revision from R4-2205134, R4-2205538 |
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**Existing tdocs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tdoc number** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-210xxxx | CR on … | XXX | Agreeable, Revised, Merged, Postponed, Not Pursued |  |
| R4-2205134 | TP to TR 38.785 on the co-channel co-existence issue | Xiaomi | Revised |  |
| R4-2205538 | Tp for Co-channel existing | Ericsson | Merged |  |
| R4-2205582 | On configured output power for NR SL inter-band con-current operation | Huawei, HiSilicon | To be noted |  |
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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

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| --- | --- | --- | --- | --- |
| **Tdoc number** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-2206532 | TP to TR 38.785 on the co-channel co-existence issue | Xiaomi | Agreeable |  |

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