**3GPP TSG-RAN WG4 Meeting #104-bis-e R4-2217766**

**Electronic Meeting, October 10– 19, 2022**

**Agenda item:** 5.2

**Source:** Moderator (CATT)

**Title:** Email discussion summary for [104-bis-e][110] NR\_LTE\_V2X\_PC5\_combos

**Document for:** Information

# Introduction

In this email discussion summary, some new band combinations for V2X con-current operation in R18 are discussed.

The candidate targets of this email discussion for 1st round and 2nd round:

* 1st round
  + Companies to provide comments on open issues involved.
  + Companies to provide comments on draft TPs and CRs involved.
* 2nd round
  + Further check the revised TPs and CRs if any.
  + Recommend the final status of TPs and CRs.

It is appreciated that the delegates for this topic put their contact information in the table below.

Contact information

|  |  |  |
| --- | --- | --- |
| **Company** | **Name** | **Email address** |
| CATT | Qiuge Guo | guoqiuge@catt.cn |
| Qualcomm | Chan Fernando | mcfernan@qti.qualcomm.com |
|  |  |  |

Note:

1. Please add your contact information in above table once you make comments on this email thread.
2. If multiple delegates from the same company make comments on single email thread, please add you name as suffix after company name when make comments i.e. Company A (XX, XX)

# Topic #1: Rapporteur input

## Companies’ contributions summary

*No inputs.*

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
|  |  |  |

## Open issues summary

## Companies views’ collection for 1st round

### Open issues

### 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** |
| XXX | *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: TPs and CRs for new band combinations

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2215376 | Qualcomm Incorporated | TP for V2X\_n34A-n47A\_V2X\_34A-n47A\_V2X\_n34A-47A |
| R4-2215433 | CATT | Draft CR for TS 38.101-1, Introduce new band combination of V2X\_n3A-n47A |
| R4-2215434 | CATT | Draft CR for TS 38.101-3, Introduce new band combinations of V2X\_n3A\_47A |
| R4-2215435 | CATT | TP on coexistence study of V2X\_n3A-n47A and V2X\_n3A\_47A |

## Open issues summary

*No open issues, and please directly provide your comments on the TPs and CRs in section 2.3.1.*

## Companies views’ collection for 1st round

### Open issues

**Issue 2-1-1: Co-existence studies for V2X\_n34A-n47A, V2X\_34A\_n47A and V2X\_n34A\_47A (TP R4-2215376).**

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Qualcomm | Support TP |
| CATT | Agree most of the contents on co-existence study but just some minor comments.  1) Clause 1 (Scope) is not a total new clause but already existed in TR 37.878 v0.0.1, suggest to write the TP based on TR skeleton.  2) suggest to use a simple table format as in R4-2215435 to define the channel BW in table 6.1.1.2-1, 6.2.1.2-1 and 6.3.1.2-1. The current table is too large and hard to be displayed.  3) In the table of section 6.1.1.4, V2X\_34A-n47A should be V2X\_34A\_n47A; in Table 6.2.1.1-1, V2X\_n34A\_n47A should be V2X\_n34A-n47A; in table 6.3.7.4.1-1 and 6.3.7.4.1-2, V2X\_n34A-47A should be V2X\_n34A\_47A; the clause numbers in 6.2.1 and 6.3.1 are not aligned.  4) there is a typo: “Table 6.2.1.2-1: V2X inter-band con-current configurations and bandwidth combination sets for V2X\_n1A-n47A”  5) the 5th IMD products of n47 (5635-5820) falls into ISM 5GHz (5150-5925, 5470-5725 and 5150-5825)  6) in the tables of section 6.2.7.4 and 6.3.7.4, the second column should be NR operating band n34. |
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**Issue 2-1-2: Co-existence studies for V2X\_n3A-n47A and V2X\_n3A\_47A (TP R4-2215435).**

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| --- | --- |
| **Company** | **Comments** |
| Qualcomm | In table 6.2.1.3-3 HD3 of n3 does not fall into ISM band 5470M - 5725M |
| CATT | Qualcomm is right and the TP can be revised. |
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**Issue 2-1-3: Whether to endorse the draft CR R4-2215433**

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| --- | --- |
| **Company** | **Comments** |
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**Issue 2-1-4: Whether to endorse the draft CR R4-2215434**

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| --- | --- |
| **Company** | **Comments** |
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### 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** |
| R4-2215376 (Qualcomm) | Qualcomm: agree with this TP |
| Company B |
| CATT: see issue 2-1-1 |
| R4-2215433 (CATT) | Company A |
| Company B |
|  |
| R4-2215434 (CATT) |  |
|  |
|  |
| R4-2215435 (CATT) | Qualcomm: Please see comments in issue 2-1-2 |
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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.*

|  |  |
| --- | --- |
|  | **Status summary** |
| **Issue 2-1-1** | *Tentative agreements:*  Revise TP R4-2215376 to address the comments. |
| **Issue 2-1-2** | *Tentative agreements:*  Revise TP R4-2215435 to address the comments. |
| **Issue 2-1-3** | *Tentative agreements:*  Endorse the draft CR R4-2215433. |
| **Issue 2-1-4** | *Tentative agreements:*  Endorse the draft CR R4-2215434. |

### 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”.*

*Moderator: Directly work on the revised TP.*

# Recommendations for Tdocs

## 1st round

**New tdocs**

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

**Existing tdocs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tdoc number** | **Revised to** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-22xxxxx |  | CR on … | XXX | Agreeable, Revised, Merged, Postponed, Not Pursued |  |
| R4-2215376 |  | TP for V2X\_n34A-n47A\_V2X\_34A-n47A\_V2X\_n34A-47A | Qualcomm | Revised |  |
| R4-2215433 |  | Draft CR for TS 38.101-1, Introduce new band combination of V2X\_n3A-n47A | CATT | Agreeable |  |
| R4-2215434 |  | Draft CR for TS 38.101-3, Introduce new band combinations of V2X\_n3A\_47A | CATT | Agreeable |  |
| R4-2215435 |  | TP on coexistence study of V2X\_n3A-n47A and V2X\_n3A\_47A | CATT | Revised |  |

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** | **Revised to** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-2215376 | R4-2217114 | TP for V2X\_n34A-n47A\_V2X\_34A-n47A\_V2X\_n34A-47A | Qualcomm | Endorsed |  |
| R4-2215435 | R4-2217115 | TP on coexistence study of V2X\_n3A-n47A and V2X\_n3A\_47A | CATT | Endorsed |  |

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