**3GPP TSG-RAN WG4 Meeting # 98-e R4-2103338**

**Electronic Meeting, 25 January – 5 February 2021**

**Agenda item:** 14.1

**Source:** Man Hung Ng (Nokia)

**Title:** Email discussion summary for [98e][152] FS\_LTE\_NR\_HPUE\_FWVM

**Document for:** Information

# Introduction

Email discussion for contributions submitted under agenda item 14.1 for Study on High-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71.

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

* 1st round: Approval of updated TR, discussion of revised Work Plan and submitted TPs on simulation results and UE RF aspects
* 2nd round: Approval of revised Work Plan and TPs on simulation results and UE RF aspects

# Topic #1: Revised Work Plan

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2101798 | Nokia, Nokia Shanghai Bell, T-Mobile USA, U.S. Cellular | Proposal 1: To request at RAN#91 to extend the study item for one quarter to complete the remaining tasks.  Proposal 2: To approve this revised work plan use it as guidance for agenda and contributions for this study item in the upcoming RAN4 e-meetings.  Observation 1: |

## Open issues summary

### Sub-topic 1-1

**Issue 1-1: Target Completion Date**

* Proposals
  + Option 1: To request at RAN#91 to extend the study item for one quarter to complete the remaining tasks
  + Option 2: To keep the current target completion date
* Recommended WF
  + TBA

### Sub-topic 1-2

**Issue 1-2: Revised Work Plan**

* Proposals
  + Option 1: To approve the revised work plan use it as guidance for agenda and contributions for this study item in the upcoming RAN4 e-meetings
  + Option 2: To keep the current work plan
* Recommended WF
  + TBA

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Ericsson | Sub topic 1-1: option 1 is ok.  Sub topic 1-2: option 1  ….  Others: |

### 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** |
| 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** | *Tentative agreements: Option 1*  *Candidate options:*  *Recommendations for 2nd round: No need for 2nd round.* |
| **Sub-topic#2** | *Tentative agreements: Option 1*  *Candidate options:*  *Recommendations for 2nd round: No need for 2nd round.* |

*Suggestion on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title** | **Assigned Company,**  **WF or LS lead** |
| #1 |  |  |

### 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”* |
| R4-2101798 | *Approved* |

# Topic #2: Updated TR

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2101799 | Nokia, Nokia Shanghai Bell | Proposal 1: To approve this updated TR for Study on High-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71.  Observation 1: |

## Open issues summary

### Sub-topic 2-1

**Issue 2-1: Updated TR**

* Proposals
  + Option 1: Approve updated TR
  + Option 2: Revise updated TR
* Recommended WF
  + TBA

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Ericsson | Sub topic 2-1: option 1  ….  Others: |

### 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** |
| 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** | *Tentative agreements: Option 1*  *Candidate options:*  *Recommendations for 2nd round: Review and approve updated TR including TPs approved in this meeting, to be presented to RAN#91-e for information* |

*Recommendations on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title** | **Assigned Company,**  **WF or LS lead** |
| #1 | TR 37.880 V0.3.0: High-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71 | Nokia, Nokia Shanghai Bell |

### CRs/TPs

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

|  |  |
| --- | --- |
| **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”* |
| R4-2101799 | *Approved* |

## Discussion on 2nd round (if applicable)

### Sub-topic 2-1

**Issue 2-1: Updated TR** **including TPs approved in this meeting**

* Proposals
  + Option 1: Approve updated TR to be presented to RAN#91-e for information
  + Option 2: Revise updated TR
* Recommended WF
  + TBA

## 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*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation** |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

# Topic #3: Coexistence Study

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2101800 | Nokia, Nokia Shanghai Bell | Proposal 1: To approve this TP to record the coexistence simulation results and observations for the UL HPUE Vs NB-IoT guard band operation scenario into TR 37.880.  Observation 1: |

## Open issues summary

### Sub-topic 3-1

**Issue 3-1: Text Proposal**

* Proposals
  + Option 1: Approve the TP
  + Option 2: Revise the TP
  + Option 3: Postpone the TP
* Recommended WF
  + TBA

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Ericsson | Sub topic 3-1: See some suggestions below  ….  Others: |

### 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** |
| R4-2101800 | Ericsson: We have following suggestion for the text after table 5.2.2-2:  *To summarize, the simulation results have shown that:*  *1) The victim NB-IoT UE UL SINR degradation caused by the 23dBm interfering LTE UE and 31dBm interfering HPUE are within 1.5dB difference).*  *2) The 31dBm interfering HPUEs generate 1.5dB, 0.6dB, 0.3dB and 0.3dB (respectively, at 5%, 50%, 95% and 99% CDF points) additional UL SINR degradation to NB-IoT UE UL SINR comparing to 23dBm LTE UEs.*  *It should be noted that this evaluation is done considering a worst case deployment, where the NB-IoT PRB is adjacent to LTE PRBs, which might not always be the case depending on the considered LTE channel BW and if NB-IoT carrier is an anchor carrier or not*. |
| 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: Option 2*  *Candidate options:*  *Recommendations for 2nd round: Review and approved the revised TP* |

*Suggestion on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title** | **Assigned Company,**  **WF or LS lead** |
| #1 |  |  |

### 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”* |
| R4-2101800 | *To be revised* |

## Discussion on 2nd round (if applicable)

**Issue 3-1: Revised Text Proposal**

* Proposals
  + Option 1: Approve the TP
  + Option 2: Revise the TP
  + Option 3: Postpone the TP
* Recommended WF
  + TBA

## 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*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation** |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

# Topic #4: UE RF

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2100131 | Nokia | Proposal 1: To approve this TP to record the discussions and findings on UE RF aspects into TR 37.880.  Observation 1: |

## Open issues summary

### Sub-topic 4-1

**Issue 4-1: Text Proposal**

* Proposals
  + Option 1: Approve the TP
  + Option 2: Revise the TP
  + Option 3: Postpone the TP
* Recommended WF
  + TBA

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Ericsson | Sub topic 4-1: option 1  ….  Others: |

### 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** |
| 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** | *Tentative agreements: Option 1*  *Candidate options:*  *Recommendations for 2nd round: No need for 2nd round* |

*Suggestion on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title** | **Assigned Company,**  **WF or LS lead** |
| #1 |  |  |

### 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”* |
| R4-2100131 | *Approved* |

## Discussion on 2nd round (if applicable)

## 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*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation** |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |