**3GPP TSG-RAN WG4 Meeting #94-e R4-20xxxxx**

**Electronic Meeting, Feb.24th – Mar.6th 2020**

**Agenda item:** 9.16

**Source:** Moderator (Ericsson)

**Title:** Email discussion summary for RAN4#94e\_#29\_NR\_n259

**Document for:** Information

# Introduction

Agenda item 9.16 corresponds to work item on introduction of band n259. The work item should be finalized in this e-meeting. The documents in the agenda items mainly are CRs and TPs. There are also discussion papers on remaining open issues namely multiband Relaxation, EESS protection and RRM requirements. There are following main topics and sub-topics under each main topic:

* Topic #1: UE RF Requirements
	+ Sub-topic 1-1: Multiband Relaxation
	+ Sub-topic 1-2: EESS protection
	+ Sub-topic 1-3: CRs and TPs
* Topic #2: BS RF Requirements
	+ Sub-topic 2-1: BS conformance requirements
	+ Sub-topic 2-2: EESS protection
	+ Sub-topic 2-3: CRs and TPs
* Topic #3: RRM RF Requirements
	+ Sub-topic 3-1: CRs and TPs
* Topic #4: General issues
	+ Sub-topic 4-1: CR

During the first round of email discussions, it is recommended to converge on all the topics above except multiband relaxation as this topic is under discussion in wider scope in agenda items 6.5.6 and 8.14.1.

During the second round of email discussion, it is recommended to converge on further Topics and approval of CRs and TPs.

# Topic #1: UE RF

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

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2000023 | Apple Inc. | Proposal 1: Define the multi-band factors with band n259 according to Table 2Table 2: Proposed extension of multi-band factors for band n259

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Supported bands** | **Peak - spherical adjustment** | **N** | **0.5\*N** | **∑MBP** | **∑MBS** |
| n257, n259n258, n259n259, n261 | 0 | 2 | 1 | 1 | 1.25 |
| n259, n260 | 0 | 1 | 0.5 | 0.5 | 0.75 |
| n257, n258, n259 | 0 | 3 | 1.5 | 1.5 | 1.75 |
| n257, n259, n260n258, n259, n260 | 0 | 2 | 1 | 1 | 1.25 |
| n257, n259, n261 | 0 | 3 | 1.5 | 1.5 | 1.75 |
| n258, n259, n261 | 0 | 3 | 1.5 | 1.5 | 1.75 |
| n259, n260, n261 | 0 | 2 | 1 | 1 | 1.25 |
| n257, n258, n259, n260n257, n258, n259, n261n257, n258, n259, n260, n261 | 0 | 4 | 2 | 2 | 2.25 |
| n257, n259, n260, n261 | 0 | 3 | 1.5 | 1.5 | 1.75 |
| n258, n259, n260, n261 | 0 | 3 | 1.5 | 1.5 | 1.75 |

 |
| R4-2000797 | Media Tek Inc. | ***Proposal****: Define n259 associated multiband relaxation factor from the two alternatives in Table 1.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Alt1(R4-1913667)** | **For Reference(R4-1913546)** | **Alt2(average of the 2 proposals)** |
| **Supported bands** | **∑MBP (dB)** | **∑MBS (dB)** | **∑MBP (dB)** | **∑MBS (dB)** | **∑MBP (dB)** | **∑MBS (dB)** |
| n259, n260 | 1.3 | 1.25 | 0.5 | 0.75 | 0.9 | 1 |
| n257, n259 | 1 | 0.75 | 1 | 1.25 | 1 | 1 |
| n258, n259 | 1 | 1.25 | 1 | 1.25 |
| n259, n261  | 0 | 0.75 | 1 | 1.25 | 0.5 | 1 |
| n257, n258, n259  | 1.7 | 1.75 | 1.5 | 1.75 | 1.6 | 1.75 |
| n258, n259, n260  | 1 | 1.25 | 1 | 1.25 |
| n259, n260, n261 | 1 | 1.25 | 1 | 1.25 |
| n257, n259, n260 | 1 | 1.25 | 1 | 1.25 |
| n257, n258, n259, n261  | 2 | 2.25 | 2 | 2.25 |
| n257, n259, n260, n261 | 1.5 | 1.75 | 1.5 | 1.75 |
| n257, n258, n259, n260, n261 | 2.2 | 2.25 | 2 | 2.25 | 2.1 | 2.25 |
| n258, n259, n260, n261 | 1.9 | 1.95 | 1.5 | 1.75 | 1.7 | 1.85 |
| n257, n258, n259, n260 | 2 | 2.05 | 2 | 2.25 | 2 | 2.15 |
| n257, n259, n261 | 0.5 | 1.25 | 1.5 | 1.75 | 1 | 1.5 |
| n258, n259, n261 | 1.5 | 1.25 | 1.5 | 1.75 | 1.5 | 1.5 |

Table 1. Two alternatives of n259 associated multi-band relaxation factor |
| R4-2001957 | Ericsson, Sony | **Proposal 1: Remove ∑MBP and ∑MBS criteria from multi-band relaxations framework** **Proposal 2: Define MBP,n and ΔMBS,n** **per band for multi-band relaxations framework****Proposal 3: Define maximum applicable MBP,n and ΔMBS,n** **of 0.5 dB** **for band n259** |
| R4-2002034 | Huawei, Hisilicon | ***Proposal: It is proposed to define 0.5dB per band relaxation factor for both ∑MBP and ∑MBS and n260 can be treated exceptionally in the supported bands including n259.***  |
| R4-2001964 | Ericsson | CR to 38.101-2 for Introduction of band n259 |
| R4-2001961 | Ericsson | TP to TR 38.887 on multiband relaxation |
| R4-200233 | NTT DOCOMO, INC | **Proposal 1: n259 UEs shall meet the unwanted emission limits to protect the EESS (passive) only when any portion of the UL transmission bandwidth is inside 39.5 - 40.5GHz.****Proposal 2: Power class 3 n259 UEs do not have to use A-MPR to meet the unwanted emission requirements to protect the EESS (passive).****Note: The above applies to CA with aggregated bandwidth up to at least 800MHz.****Proposal 3: A new NS(s) is not required for n259 for both single and CA cases.** |

## Open issues summary

The main remaining open issue for UE RF requirement is the multiband relaxation. As this topic is under discussion in a wider scope for both Rel-15 and Rel-16 in agenda items 6.5.6 and 8.14.1, it’s recommended to finalize this topic after those agenda items are concluded.

### Sub-topic 2-1: Multiband Relaxation

The multiband relaxation for band n259 has been discussed in RAN4 meeting#93 and the following WF was agreed:

* Option 1 (default): To define multiband relaxation factor for each” supported bands with n259”, respectively
* Option 2: Remove multiband relaxation for Rel-16
* Option 3: To define an upper limit per band for Multiband relaxation

**Issue 2-2-1: How to define Multiband Relaxation**

* Proposals
	+ Option 1: 1 company
	+ Option 2: 0 companies
	+ Option 3: 2 companies
* Recommended WF
	+ Convergence on how to implement option 3

### Sub-topic 2-2: Protection of EESS

This topic hasn’t been discussed in previous meetings. There is one contribution which discusses how to incorporate WRC19 conclusion for EESS protection in 36-37GHz into 3GPP specification and necessity of A-MPR and NS for n259.

**Issue 2-2-2: How to incorporate WRC19 conclusion for EESS protection in 36-37GHz into 3GPP**

* Proposals
	+ Proposal 1: n259 UEs shall meet the unwanted emission limits to protect the EESS (passive) only when any portion of the UL transmission bandwidth is inside 39.5 - 40.5GHz.
	+ Proposal 2: Power class 3 n259 UEs do not have to use A-MPR to meet the unwanted emission requirements to protect the EESS (passive).
	+ Note: The above applies to CA with aggregated bandwidth up to at least 800MHz.
	+ Proposal 3: A new NS(s) is not required for n259 for both single and CA cases.
* Recommended WF
	+ Need discussion

### Sub-topic 2-3: CR and TP

**Issue 2-2-3: CR and TP**

* Proposals
	+ Proposed text to TR 38.887
	+ Change request to TS 38.101-2
* Recommended WF
	+ To be revised based on agreements in Sub-topics 1-1 and 1-2 and be approved after 2nd round of discussions

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| XXX | Sub topic 1-1: Sub topic 1-2:….Others: |
| Qualcomm | Sub topic 1-2: If resolutions of WRC-19 were adopted, RAN4 would need to introduce them as additional emissions requirements. These emissions restrictions cannot be added as general requirements due to existing UEs out in the field today designed and built to a different general requirement limit. The affected band per WRc-19 has partial overlap with n259, so we think it is necessary for n259 to be explicitly associated with the emissions restrictions. Our analysis (R4-2000216 and 219) shows that the AMPR would indeed be 0 however, for all practical deployments in n259. |
| NTT DOCOMO, INC. | Sub topic 2-1: Multiband RelaxationFor Rel-16, we would like to take option 2. For Rel-15 when applying release-independent approach from Rel-15 to n259, we agree with R4-2001957. In order to solve the issue raised from RAN5 (R5-199424), we should specify per band relaxation without multi-band framework.Sub topic 2-2:For the comment from Qualcomm about 1-2, A-MPR is possible to be used even without a new NS other than NS\_200. Even if we use a new NS other than NS\_200, this does not mean that A-MPR is applied to. In short, NS other than NS\_200 does not guarantee that A-MPR is introduced. We do not object applying A-MPR if needed. But we do not have to use a new NS than NS\_200 since the emission requirement shall be met in most of the world. |
| NOKIA | Sub-topic 2-1: Support Option 2. Nokia view on MB relaxation is presented in R4-2000526 for RAN5 LS.Sub-topic 2-2: We understand that WRC-19 limit is aligned with general emissions requirements; A-MPR is not needed. |
| Huawei | Sub-topic 2-1: Support option 3.Sub-topic 2-2: Whether we need to introduce additional requirements depends on the regulatory progress. Once the regulation process starts, we can start to define corresponding requirements as well. We prefer to decide on this when the EESS protection requirement is clear.  |

### 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** |
| R4-2001964 | Huawei: 1. There is no agreement that n259 will be introduced for PC1, and EIRP/EIS requirements for PC1 are not defined yet. Thus n259 should not be added in Table 6.3.1.1-1 and 6.3A.1.1-1 for min output power requirement for PC1.2. Band n260 is not applied for power class 2, which should be reflected in NOTE 2 similar to n260 in Table 6.3.1.2.-1 and 6.3A.1.2-1. |
| 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:* |

*Recommendations 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 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”* |

## 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”* |

# Topic #2: BS RF

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

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2001193 | NTT DOCOMO, INC | **Proposal 1: In order to apply to band n259, update the frequency range in the TT table as below:*** **Radiated transmit power:**
	+ **2.0 dB (37 – 43.5 GHz) for normal condition**
	+ **3.3 dB (37 – 43.5 GHz) for extreme condition.**
* **OTA base station output power:**
	+ **2.4 dB (37 – 43.5 GHz)**
* **OTA transmitter OFF power:**
	+ **3.3 dB (37 – 43.5 GHz)**
* **OTA ACLR**
	+ **2.6 dB (37 – 52.6 GHz) for relative ACLR**
	+ **2.7 dB (37 – 52.6 GHz) for absolute ACLR**
* **OTA operating band unwanted emissions**
	+ **2.7 dB (37 – 52.6 GHz)**

**Proposal 2: Update the frequency range of the test requirements for “radiated transmit power”, “OTA base station output power” and “OTA transmitter transient period” from “37 GHz < f ≤ 40 GHz” to “37 GHz < f ≤ 43.5 GHz”** |
| R4-2001192 | NTT DOCOMO, INC | **Proposal 1: Introduce new additional OBUE requirements for the EESS (passive) (36 – 37 GHz) protection.****Proposal 2: The requirement for the EESS (passive) protection applies to BSs that support a frequency range that partially or completely overlaps with“Frequency band for IMT station” (i.e., 37 – 40.5 GHz).****Proposal 3: Define both limits of -13dBm/MHz and +7dBm/GHz in the frequency range 36 -37 GHz for the EESS (passive) protection.****Table 1: Proposed additional operating band unwanted emissions *basic limits* for protection of EESS (passive)**

|  |  |  |  |
| --- | --- | --- | --- |
| Frequency range | *Basic limit* | *Measurement Bandwidth* | Note |
| 36 – 37 GHz | -13dBm | MHz | Applicable to NR BS operating in Band n259, with supported frequency range partially or completely overlaps with 37-40.5 GHz. The requirement applies even though part of the range falls in the spurious domain. |
| +7dBm | GHz |

 |
| R4-2001960 | Ericsson | TP to TR 38.887 on BS RF requirements |
| R4-2001965 | Ericsson | CR to 38.141-2 for Introduction of band n259 |
| R4-2001966 | Ericsson | CR to 38.104 for Introduction of band n259 |

## 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: BS conformance requirements

**Issue 3-1: needed updates in TS 38.141-2 for introduction of band n259**

* Proposals

Proposal 1: In order to apply to band n259, update the frequency range in the TT table as below:

* Radiated transmit power:
	+ 2.0 dB (37 – 43.5 GHz) for normal condition
	+ 3.3 dB (37 – 43.5 GHz) for extreme condition.
* OTA base station output power:
	+ 2.4 dB (37 – 43.5 GHz)
* OTA transmitter OFF power:
	+ 3.3 dB (37 – 43.5 GHz)

Proposal 2: Update the frequency range of the test requirements for “radiated transmit power”, “OTA base station output power” and “OTA transmitter transient period” from “37 GHz < f ≤ 40 GHz” to “37 GHz < f ≤ 43.5 GHz”

* Recommended WF
	+ Approval of Proposal 1 and 2 if no concern raised

###  Sub-topic 2-2: EESS protection

This topic hasn’t been discussed before. There is one input which discusses how to incorporate WRC19 conclusion for EESS protection in 36-37GHz into 3GPP specification.

**Issue 3-2: How to incorporate WRC19 conclusion for EESS protection in 36-37GHz into 3GPP**

* Proposals
	+ Proposal 1: Introduce new additional OBUE requirements for the EESS (passive) (36 – 37 GHz) protection.
	+ Proposal 2: The requirement for the EESS (passive) protection applies to BSs that support a frequency range that partially or completely overlaps with“Frequency band for IMT station” (i.e., 37 – 40.5 GHz).
	+ Proposal 3: Define both limits of -13dBm/MHz and +7dBm/GHz in the frequency range 36 -37 GHz for the EESS (passive) protection.
* Recommended WF
	+ Need discussion

### Sub-topic 2-3: CRs and TP

**Issue 3-3: CRs and TP**

* Proposals
	+ Proposed text to TR 38.887
	+ Change request to TS 38.104
	+ Change request to TS 38.141-2
* Recommended WF
	+ To be revised based on agreements in Sub-topics 2-1 and 2-2 and be approved after 1st round of discussions

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| Huawei | Sub topic 3-2: Whether EESS protection based on WRC-19 recommendation should be defined as a general BS requirement shall be determined in the BS RF topic rather than in n259 WI.….Others: |
| Samsung | Sub topic 2-2: Each proposal(option) of Issue 3-2 seems to be a different topic that needs to be handled separately. In our view, this upper EESS protection anyway should be applied similar logic and tone with lower(24GHz) EESS protection for the spec. |

### 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:**Candidate options:**Recommendations 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”* |

## 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”* |

# Topic #3: RRM Requirements

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

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2001156 | Ericsson | **Proposal 1: Define new NR frequency band group, AA: NR\_TDD\_FR2\_AA, to include n259 PC3.****Proposal 2: Define Minimum SSB\_RP values of -108.5 dBm/120kHz and -106.5 dBm/120kHz for Intra-frequency and Inter-frequency, respectively to update rtelevant tables in TS 38.133.****Proposal 3: Define Minimum SSB\_RP values of -95.7 dBm/120kHz and -93.7 dBm/120kHz for Intra-frequency and Inter-frequency, respectively to update rtelevant tables in TS 38.133.****Observation 1: In the calculation of SSB\_RP values for band n259, ΣMBP is not included as multiband relaxation framework is under discussion to be updated.**  |
| R4-2001963 | Ericsson | TP to TR 38.887 on RRM |
| R4-2001967 | Ericsson | CR to 38.133 for Introduction of band n259 |

## Open issues summary

For introduction of band n259, RRM requirement should be included in TS 38.133.

### Sub-topic 3-1: RRM requirements

**Issue 4-1: needed updates in TS 38.133 for introduction of band n259**

* Proposals
	+ Proposal 1: Define new NR frequency band group, AA: NR\_TDD\_FR2\_AA, to include n259 PC3.
	+ Proposal 2: Define Minimum SSB\_RP values of -108.5 dBm/120kHz and -106.5 dBm/120kHz for Intra-frequency and Inter-frequency, respectively to update rtelevant tables in TS 38.133.
	+ Proposal 3: Define Minimum SSB\_RP values of -95.7 dBm/120kHz and -93.7 dBm/120kHz for Intra-frequency and Inter-frequency, respectively to update rtelevant tables in TS 38.133.
* Recommended WF
	+ To be approved, perform modification if concerns raised in discussions

### Sub-topic 3-1: CR and TPs

**Issue 3-2-2: CR and TP**

* Proposals
	+ Proposed text to TR 38.887
	+ Change request to TS 38.133
* Recommended WF
	+ To be revised based on agreements in Sub-topic 3-1 and be approved after 2nd round of discussions

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| XXX | Sub topic 2-1: Sub topic 2-2:….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:**Candidate options:**Recommendations 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”* |

## 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”* |

# Topic #4: General issues

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

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2001961 | Ericsson | TP to TR 38.887 on general issues |
| R4-2001968 | Ericsson | TR 38.88:7: Introduction of band n259 |

## Open issues summary

The work item should be finalized in this meeting, so TR 38.887 need to be completed.

### Sub-topic 4-1: TP

**Issue 5-1: Complete TR 38.887**

* Proposals
	+ Proposed text on general issues
* Recommended WF
	+ To be approved if no concern is raised

## Companies views’ collection for 1st round

### Open issues

|  |  |
| --- | --- |
| **Company** | **Comments** |
| XXX | Sub topic 2-1: Sub topic 2-2:….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:**Candidate options:**Recommendations 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”* |

## 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”* |