**3GPP TSG-RAN WG4 Meeting # 94-e-Bis R4-200XXXX**

**Electronic Meeting, 20 – 30 Apr., 2020**

**Agenda item:** 4.4.1, 4.4.5

**Source: Hisashi Onozawa (Nokia)**

**Title:** Email discussion summary for [95e][102] UE RF requirements maintenance Part 1

**Document for:** Information

# Introduction

**Moderator: In this E-mail thread, the following UE RF maintenance topics are discussed.**

**Topic #1: Maintenance for bands and band combinations in 38.101-1 (agenda 4.4.1.1)**

**Topic #2: Maintenance for bands and band combinations in 38.101-2 (agenda 4.4.1.2)**

**Topic #3:** **Maintenance for bands and band combinations in 38.101-3 (agenda 4.4.1.3)**

**Topic #4:** **Editorial CRs (agenda 4.4.5)**

**Topic #5:** **LS reply on CA/DC fallback (agenda 4.4.1.2/13)**

# Topic #1: Maintenance for bands and band combinations in 38.101-1 (agenda 4.4.1.1)

**Moderator: Please include comments directly in 1.3.2 as we have only maintenance CRs.**

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2006135 Corrections of UE co-ex tables for Japan-related bands (R15) | SoftBank, NTT docomo, KDDI | Summary of change:  1) Protections among n5, B74 and n77 - n79 are added.  2) Note 13(B3 frequency range) and Note 30(B41 frequency range) are deleted as protected bands are not relevant to specific CBWs.  3) For n8-n78 2UL CA, Note 5(RB restriction condition) is changed as A-MPR(NS\_43) is applied instead in NR.  4) Some errors are corrected: unneccesary note(39) and band(9) are deleted. Missed Note 8 is added. |
| R4-2006136 Corrections of UE co-ex tables for Japan-related bands (R15) | SoftBank, NTT docomo, KDDI | This is Cat F CR due to additional changes.  Summary of change:  For R16, in addition to the above items,  5) Same modifications in 1), 2) and 4) are applied to 2UL CA tables.  6) Protection requirements not approprite for Japan (such as using B38, B40 toward PHS/J-specific bands) are removed from CA table.  7) Some errors are corrected in 2UL CA tables: missed protected bands, notes, including corrections of Note 12/15 to align with the single band table. |
| R4-2007025 CR for [agreed] asynchronous operation for NR CA n78-n79  R4-2007026 (Cat A CR) | NTT DOCOMO | This is already agreed R4-1915529 in RAN4#93, but it was not implemented.  Summary of change:  Introduce additional Delta\_TIB and MSD for aynchronous operation:  Delta\_TIB of 1.5dB for n78 in frequency range of 3700-3800MHz.  Delta\_TIB of 1.5dB for n79 in frequency range of 4400-4500MHz.  MSD of 2dB for n79 and 2.6dB for n78 |

## Open issues summary

## Companies views’ collection for 1st round

### Open issues

### CRs/TPs comments collection

**Moderator: Please leave your company name and comments only if CR should be revised or should not be approved.**

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| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2006135 | OPPO: Generally ok with this CR, a clarification question since there is new bands added in the coexistence table, how to handle UEs designed before or on the time when these new requirements are added? |
| Company B |
|  |
| R4-2006136 | Company A |
| Company B |
|  |
| R4-2007025 | 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.*

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

*Recommendations on WF/LS assignment*

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

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

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| **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)

## ummary 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** |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

# Topic #2: Maintenance for bands and band combinations in 38.101-2 (agenda 4.4.1.2)

**Moderator: Please include comments directly in 2.3.2 as we have only maintenance CRs.**

## Companies’ contributions summary

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| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2006815  CR for TS 38.101-2: Intra-band non-contiguous CA configuration clarifications  R4-2006816 Cat A CR | MediaTek | [Already endorsed R4-2005201 in RAN4#94bis-e]  Summary of change:  1. Add NOTE 5 in Table 5.5A.2-1 and NOTE 4 in Table 5.5A.2-2 to clarify the definition of  (BWChannel,block) which should be “the maximum total bandwidth from the summation of the sub-block bandwidths and shall be less than the bandwidth of the operating band”.  2. Remove NOTE 1 index for values under  (BWChannel,block) column for certain CA configurations which should have been removed in previous CR R4-1907999.  3. Re-calculate the maximum total bandwidth for some CA configurations to align with the  (BWChannel,block) definition. |
| R4-2006907  CR to TS 38.101-2 on corrections to intra-band CA band for FR2 (Rel-15)  R4-2006908 Cat A CR | ZTE | Summary of change:  (1) Correct the NR CA band in table 5.2A.1-1.  (2) Typo corrections on intra-band CA configuration table.  (3) Remove the empty tables in section 5.5A.1 and 5.5A.2. |

## Open issues summary

## Companies views’ collection for 1st round

### Open issues

### CRs/TPs comments collection

**Moderator: Please leave the company name and comments here only if CR should be revised or should not be approved.**

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| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2006815 | Company A |
| Company B |
|  |
| R4-2006907 | Company A |
| Company B |
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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** |
| **Sub-topic#1** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |

*Suggestion on WF/LS assignment*

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|  | **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*

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| **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*

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| **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: Maintenance for bands and band combinations in 38.101-3 (agenda 4.4.1.3)

**Moderator: Please include comments directly in 3.3.2 as we have only maintenance CRs.**

**Note that R4-2006242 is moved Rel-16 maintenance (E-mail thread #126).**

## Companies’ contributions summary

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| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2006137  Corrections of UE co-ex tables for Japan-related bands (R15)  R4-2006138 Cat A CR | SoftBank, NTT docomo, KDDI | Summary of change:  1) Protections among n5, B74, n77 - n79 are added.  2) Note 13(B3 frequency range) and Note 19(B41 frequency range) are deleted as protected bands are not relevant to specific CBWs.  3) Japan-related requirements are removed from B38, B40 and B5(which is limited to NB/MTC in Note 4.)  4) Missed PHS protection is added to DC\_1\_n77-n79.  5) Some errors are corrected: The contents of Note 10/11 are corrected to align with those of 36.101. |
| R4-2006138  Corrections of UE co-ex tables for Japan-related bands (R16) | SoftBank, NTT docomo, KDDI | [This is Cat F CR due to additional changes.]  For R16, in addition to above:  6) The same modification is made for Intra-non cont. table (DC\_3\_n3).  7) n41 protection to 2505-2535MHz(NS\_47) with 30MHz CBW is added to 2UL EN-DC tables.  8) Errors in notes/protected bands are corrected for R16 combos including Japan bands, including correcting the content of Note 10/11 in EN-DC. |
| R4-2006342  CR Coexistence cleanup for 38101-3 Rel15  R4-2006343 (Cat A CR)  Moderator: Please register Cat A CR in the same agenda item as the original CR. | Apple Inc. | Summary of change:  Band protections are defined in the current release which are technical not possible to realize |
| R4-2006452  CR for TS 38.101-3: Missing MSD due to cross band isolation  R4-2006453 (Cat A CR) | MediaTek | [Already endorsed R4-2005203 in RAN4#94bis-e]  Summary of change:  Add missing MSD due to cross band isolation for DC\_1A\_n40A, DC\_3A\_n50A, DC\_3A\_n51A , DC\_30A\_n66A and DC\_46A/C/D/E\_n78A |
| R4-2006454  CR for TS 38.101-3: MSD due to UL harmonic  R4-2006455 (Cat A CR) | MediaTek | [Already endorsed R4-2005204 in RAN4#94bis-e]  Summary of change:  1. Add missing MSD numbers due to UL harmonic for DC\_B5-n78  2. Add missing MSD numbers due to UL harmonic for DC\_B12-n66 and DC\_B28-n51  3. Add missing MSD numbers due to UL harmonic for DC\_B26-n41 for 100MHz CBW |
| R4-2006457 CR for TR37.863-01-01: TP for missing MSD due to UL harmonic and cross band isolation for band combinations | MediaTek | [Already endorsed R4-2005202 in RAN4#94bis-e]  Summary of change:  CR for TR37.863-01-01: TP for missing MSD due to UL harmonic and cross band isolation for band combinations |
| R4-2006490  MOP for interband EN-DC including both FR1 and FR2 REL15  R4-2006491 (Cat A CR) | Nokia, Nokia Shanghai Bell | Summary of change:  Add missing MSD numbers due to UL harmonic for DC\_B28-n51, DC\_1A\_n40A, DC\_3A\_n50A, DC\_3A\_n51A , DC\_30A\_n66A and DC\_46A/C/D/E\_n78A |
| R4-2008229 CR for 38.101-3 Correction on EN-DC synchronous carriers (R15)  R4-2008230 (Cat A CR) | Huawei, HiSilicon | Summary of change:  Add a new NOTE for DC\_20\_n28 to avoid the unnecessry limitation on network deployment. |

## Open issues summary

## Companies views’ collection for 1st round

### Open issues

### CRs/TPs comments collection

**Moderator: Please leave your company name and comments only if CR should be revised or should not be approved.**

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2006137 | Company A |
| Company B |
|  |
| R4-20061378 | Company A |
| Company B |
|  |
| R4-2006342 | Company A |
| R4-2006452 | Company A |
| R4-2006454 | Company A |
| R4-2006457 | Company A |
| R4-2006490 | Company A |
| R4-2008229 | Company A |

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

*Suggestion on WF/LS assignment*

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

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

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| **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*

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| **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: Editorial CRs (agenda 4.4.5)

**Moderator: Please include comments directly in 4.3.2 as we have only maintenance CRs.**

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2006148 (CR on ACLR MBW definition in FR1)  R4-2006149 (Cat A CR) | Anritsu, Skyworks | Summary of change: Editorial correction to 38.101-1  Add MHz at the item of NR ACLR measurement bandwidth in Table 6.5.2.4-1-1.  Align the number of digits after decimal point of ACLR measurement band width in Table 6.5.2.4.1-1. |
| R4-2006390 (CR to TS 38.101-3: editorial corrections on wide band Intermodulation for intra-band contiguous EN-DC in FR1)  R4-2006392 (Cat A CR) **Moderator: Please do not upload Cat A CR before the original CR is approved.** | Xiaomi | Summary of change: Editorial correction to 38.101-3  Text “REFSENS + Aggregated BW specific value below” is added to table 7.8B.2.1-1. |
| R4-2006846 (CR on minor corrections to TS 38.101-1 (Rel-15))  R4-2006870 (Cat A CR) | ZTE | Summary of change: Editorial correction to 38.101-1  (1) Correct the table header in section 5.3, 5.3A, 5.5A.1, 5.5A.3 and 5.5C.  (2) Remove empty rows in the mapping table of synchronization raster to SS block resource element and correct some other typos. |
| R4-2006903 (CR on minor corrections to TS 38.101-2 (Rel-15))  R4-2006904 (Cat A CR) | ZTE | Summary of change: Editorial correction to 38.101-2  (1) Correct the table header in section 5.3.2, 5.3.3 and 5.3.5.  (2) Remove empty rows in the mapping table of synchronization raster to SS block resource element.  (3) Correct some other typos. |
| R4-2006905 (CR on minor corrections to TS 38.101-3 (Rel-15))  R4-2006906 (Cat A CR) | ZTE | Summary of change: Editorial correction to 38.101-3  (1) Correct the abbreviation in section 3.3.  (2) Typo corrections in section 4.2, 5.2A.1, 5.3B and 5.3B.1.3.  (3) Correct the Table 5.3B-1, 5.3B.1.2-1 and 5.3B.1.3-1. |
| R4-2006939 (Maintenance CR to 38101-1 on relative power tolerance R15)  R4-2006940 (Cat A CR) | Huawei, HiSilicon | Summary of change: Editorial correction to 38.101-1  Correct ‘monotically’ with monotonically. |
| R4-2006941 (Maintenance CR to 38307 on a reference spec number R15)  R4-2006942 (Cat A CR) | Huawei, HiSilicon | Summary of change: Editorial correction to 38.307  Correct 36.307 with 38.307. |

## Open issues summary

## Companies views’ collection for 1st round

### Open issues

### CRs/TPs comments collection

**Moderator: Please leave your company name and comments only if CR should be revised or should not be approved.**

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2006148 | Company A |
| Company B |
|  |
| R4-2006390 | Company A |
| Company B |
|  |
| R4-2006846 | Company A |
| Company B |
|  |
| R4-2006903 | Company A |
| Company B |
|  |
| R4-2006905 | Company A |
| Company B |
|  |
| R4-2006939 | Company A |
| Company B |
|  |
| R4-2006941 | 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.*

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

*Suggestion on WF/LS assignment*

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| --- | --- | --- |
|  | **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*

|  |  |
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| **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*

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| **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 #5: LS on CA/DC fallback (agenda 4.4.1.2/13)

**Moderator: A reply to the RAN2 LS R4-2006132/R2-2004267 “*Reply LS on Handling of Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2”* is discussed in Topic #5.**

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2006496 | Nokia | A1: RAN4 does not intend to specify exceptional band combinations in RAN4 specification. All Fallbacks for combined contiguous and non-contiguous CA or DC configurations in FR2 can be considered as exceptional.  A2: See A1 |
| R4-2006570 | Intel | A1: In the original RAN4 agreement, RAN4 agreed a general criteria where fallback exception is being allowed:  “A CA or DC configuration which include FR2 intra-band CA combinations with multiple subblocks, where at least one of the subblocks consists of a contiguous CA combination.”  The following is implemented in section 4.2 Applicability of minimum requirements in TS 38.101-2 and TS 38.101-3:  “A terminal which supports CA or DC configurations, which include FR2 intra-band CA combinations with multiple subblocks, where at least one of the subblocks consists of a contiguous CA combination, is not required to support all possible fallback combinations but can directly fall back to a single FR2 carrier. Deactivating carriers within the CA or DC combination is still possible.”  Depending of RAN4 discussion and necessity, RAN4 might further consider introducing a note or a new column in Table 5.5A.2-2 (NR CA configurations and bandwidth combination sets for intra-band non-contiguous CA) to indicate fallback exception.  A2: As long as the criteria unchanged, there is no chance one band combination where exception is allowed, becomes non “exceptional” band combination. |
| R4-2006577 | MediaTek | Observation 1: According to current RAN2 spec, UE can skip the capability report of fallback BC, and network can assume that UE supports all fallback BCs.  Observation 2: RAN4 agreed that UE is not required to support all possible fallback BC for an FR2 intra-band CA combinations with multiple subblocks, where at least one of the subblocks consists of a contiguous CA combination.  Observation 3: RAN4 can revert the previous agreement, only if RAN4 achieves the consensus to do so.  Proposal 1: Before a consensus to revert the agreement is reached, RAN4 should keep the previous agreement and focus on answering the questions from RAN2 in the reply LS.  Proposal 2: It is still up to RAN2 on which solution they would take to implement RAN4’s agreement in their spec.  Proposal 3: Answer to Q1 of R2-2004267: The exceptional band combination could at least be the fallback band combinations without corresponding RF requirements in RAN4 specs.  Proposal 4: Answer to Q2 of R2-2004267: No |
| R4-2006578 | MediaTek | A1: The exceptional band combination could at least be the fallback band combinations without corresponding RF requirements in RAN4 specs.  A2: No |
| R4-2006625 | Apple | A1: RAN4 asked for not mandating all fallbacks generally for all band combinations including a combination of contiguous and non-contiguous FR2 CA or MR-DC, as especially these band combinations result in a huge amount of fallback combination permutations. Out of this class of combinations the UE can choose which combinations to support with fallbacks and which combinations to support with just falling back to a single carrier. The UE would signal the combinations for which it supports all fallbacks in the usual container and the specific band combinations where it doesn’t support the fallbacks in the new container “supportedBandCombinationList-FR2CAFallbackException” proposed by RAN2. There is no plan to introduce an additional list of “exceptional” combinations in 38.101-2 or 38.101-3, as all FR2 combinations with combined contiguous and non-contiguous intra-band CA/MR-DC are allowed to directly fall back to a single carrier.  A2: There is no plan to separately list “exceptional” or non-“exceptional” band combinations in 38.101-2 or 38.101-3, but to define the “exceptional” combinations as a specific class of combinations like a combination of intra-band contiguous and non-contiguous FR2 CA/MR-DC band combinations. There is no plan to add this feature to other existing classes of band combinations. This does not preclude that for future classes of combinations RAN4 might consider to introduce this feature, too. |

## Open issues summary

**To summarize the contributions,**

1. **The consensus is that RAN4 agreements in R4-1908028**/**R4-1910238/R4-1910239 are kept in principle, i.e., the exception is for CA or DC configurations including FR2 intra-band CA combinations with multiple subblocks, where at least one of the subblocks consists of a contiguous CA combination.**
2. **For A1, two companies think no further change in RAN4 is needed, but two companies think more discussion may be needed.**
   1. **Exceptional band combinations are not captured other than already clarified in RAN4 specs. (Apple, Nokia)**
   2. **RAN4 might further consider introducing a note or a new column in Table 5.5A.2-2 to indicate fallback exception. (Intel)**
   3. **The exceptional band combination could at least be the fallback band combinations without corresponding RF requirements in RAN4 specs. (Mediatek)**
3. **For A2, the consensus is that RAN4 does not foresee a change in exception and non-exception for exiting classes of band combinations.** 
   1. **One company comments future classes may not be precluded. (Apple)**

### Sub-topic 5-1: How to capture exceptional band combinations (A1)

* **Please comment whether if RAN4 specs (i.e., TS 38.101-2 and/or TS 38.101-3) shall be further clarified on exceptional/non-exceptional band combinations, such as indicating which band combinations is allowed for the fallback exception.**
  + **If it shall, please provide more detail how these RAN4 specs, TS 38.101-2 and/or TS 38.101-3shall be modified and also whether other specs (such as TS 38.307) should be modified or not.**
  + **If it shall not, Nokia’s or Apple’s A1 text can be used for the LS. Please also leave comments which text is better, and what change in text is needed.**
* **Options for Sub-topic 5.2-1:**
  + **Option 5.2.1-1: Prepare draft RAN4 CRs to TS 38.101-2 and TS 38.101-3 to further clarify the previous RAN4 agreement in R4-1908028 and inform it to RAN2.**
  + **Option 5.2.1-2: No change to RAN4 specs. Provide information to RAN2 based on Nokia or Apple LS text (R4-2006496 or R4-2006625).**
  + **Option 5.2.1-3: Other than 5.2.1-1 or 5.2.1-2**

### Sub-topic 5-2: Whether a change in exception/non-exception is foreseen (A2)

* **The consensus seems to be to answer “NO”. Please comment if that is not the case.**
* **Moderator believes it is not necessary to mention a future class, as a future spec is always open for discussion. Please comment what level of addition information (other than saying “NO”) is necessary for RAN2 to complete CRs. Or is it not necessary to provide more information, as it is up to RAN2 to decide the rest?**
* **Options for Sub-topic 5.2-2:**
  + **Option 5.2.2-1: Answer “No”**
  + **Option 5-2-1-2: Answer “No” and provide additional LS text based on R4-2006625 (Apple)**
  + **Option 5.2.1-3: Other than 5.2.2-1 or 5.2.2-2.**

## Companies views’ collection for 1st round

### Open issues

**Moderator: Please leave your company name and comments here.**

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| --- | --- |
| **Company** | **Comments** |
| XXX | Sub topic 5-1: How to capture exceptional band combinations (A1)  Sub-topic 5-2: Whether a change in exception/non-exception is foreseen (A2)  Others: |
| OPPO | Sub topic 5-1: Support option 5.2.1-2, No need to specify exceptional/non-exceptional band combinations in RAN4 spec. Wording in either Nokia or Apple is ok.  Sub-topic 5-2: Option 5.2.2-1 |
| Verizon | For options of both 5-1 and 5-2, we shared same concern of Ericsson in their contributions ([R4-2003863](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_94_eBis/Docs/R4-2003863.zip) and [R4-2003864](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_94_eBis/Docs/R4-2003864.zip)) to the last RAN4 meeting. Particularly, we agree if the specifications don’t support all of the fall-back configurations, it will impact to the designed systems and even if not all the combos are conformance tested. We suggest RAN4 to rescosider the early deicsion before send LS response on CA/DC fallback back to RAN2 in case if Ericsson maintianed the same concner. |
|  |  |

### CRs/TPs comments collection

## 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”* |