**3GPP TSG-RAN WG4 Meeting #109 draft R4-2318107**

**Chicago, US, 13-17 Nov 2023**

**Title:** Topic summary for [109][101] Upto\_R16\_UERF\_maintenance

**Source:** Moderator (OPPO)

**Agenda item:** 4.8

**Document for:** Information

# Introduction

This is the summary for Rel-15/16 maintenance under agenda 4.1 which includes 133 papers in total (CAT F+A) and 47 papers with CAT-F and discussion papers.

**List of topics below:**

* 5MHz CBW with 30kHz SCS (2)
* UE coexistence simplify CRs (6)
* MOP table format for 38.101-3 (4)
* Harmonic mixing MSD (2)
* 38.307 working approaches (1)
* CRs for 38.101-1 (19)
* CRs for 38.101-2 (6)
* CRs for 38.101-3 (6)
* CRs for 38.307 (1)

# 5MHz CBW with 30kHz SCS (2)

## Contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2320639 | Nokia | FRCs for 5 MHz channel bandwidth in 30 KHz SCS   1. None of the bands defined, uses 30 KHz SCS for 5 MHz channel bandwidth. 2. Agree to delete the 5 MHz channel bandwidth column from the 30 KHz SCS in FRC tables. 3. Agree to the companion CRs [2—5]. 4. Encourage other companies to debate if Table 5.3.2-1 should be corrected too. |
| R4-2320632(R15)  CAT-A:  R4-2320633  R4-2320634  R4-2320635 | Nokia | [NR\_newRAT] CR to 38.101-1 on FRC deletion for 5MHz 30 KHz |

## Open issues summary

### Sub-topic 1-1

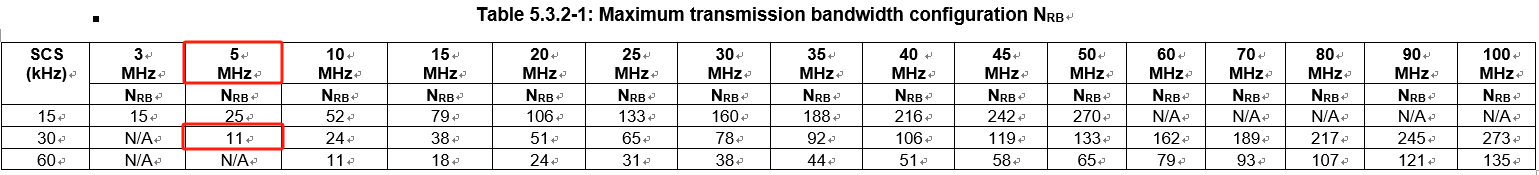
**Issue 1-1-1: Whether to delete 5 MHz CBW with 30 KHz SCS from FRC tables**

Option 1: Yes

Option 2: No

Recommended WF:

**Issue 1-1-2: Whether to delete 5 MHz CBW with 30 KHz SCS from table 5.3.2-1 of 38.101-1**



Option 1: Yes

Option 2: No

Recommended WF:

### CRs

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc number** | **Company** | **Comments** | **Recommendation** |
| R4-2320632(R15)  CAT-A:  R4-2320633  R4-2320634  R4-2320635 | Nokia | [NR\_newRAT] CR to 38.101-1 on FRC deletion for 5MHz 30 KHz |  |

# UE coexistence simplify CRs (6)

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc** | **Company** | **Title/Comments** | **Recommendation** |
| R4-2318520(R16)  CAT-A:  R4-2318521  R4-2318522 | Nokia | CR for 38.101-1 UE to UE coex R16 (38101-1)  *Moderator note: it clarifies the definition of intersection requirements, and the testability according to WF R4-2317633.* |  |
| R4-2318523(R16)  CAT-A:  R4-2318681  R4-2318525 | Nokia | CR for 38.101-3 UE to UE coex R16 (38101-3) |  |
| R4-2318517(R16)  CAT-A:  R4-2318518  R4-2318519 | Nokia | CR for 36.101 UE to UE coex R16 (36101) |  |
| R4-2318451(R16)  CAT-A:  R4-2318452  R4-2318453 | Meta Ireland, Nokia | CR on TS38.101-1 for simplification of NR V2X UE coexistence in Rel-16 (38101-1) |  |
| R4-2318454(R16)  CAT-A:  R4-2318455  R4-2318456 | Meta Ireland, Nokia | CR on TS38.101-3 for simplification of NR V2X UE coexistence in Rel-16 (38101-3) |  |
| R4-2318448(R16)  CAT-A:  R4-2318449  R4-2318450 | Meta Ireland, Nokia | CR on TS36.101 for simplification of LTE V2X UE co-existence in Rel-16 (36101) |  |

*Moderator note: WF R4-2317633 was agreed in RAN4#109 with below key information, CRs seems aligned with the WF:*

|  |
| --- |
| **Conclusion**  This WF has a proposal for a CR for 38.101-1 NR CA section 6.5A.3.2.3 Spurious emissions for UE co-existence for Inter-band CA. If this proposal is acceptable similar changes are being proposed for LTE UL interband CA in 36.101 and EN-DC UL DC in 38.101-3. CRs would be provided for next meeting for all thee specifications. |

# MOP table format for 38.101-3 (4)

## Contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2320606 | CHTTL | Discussion on the HPUE inter-band uplink EN-DC support in the MOP table  **Proposal 1: Align the structure of the MOP table for uplink inter-band EN-DC in TS 38.101-3 with the NR-CA table in TS 38.101-1 that there will be one row per UL configuration, and approve the related CRs in R4-2320607, R4-2320608, R4-2320609.**  Note that the PC2 support of DC\_1A\_n84A\_ULSUP-TDM\_n77A, DC\_1A\_n84A\_ULSUP-TDM\_n78A, DC\_3C\_n77A, DC\_3C\_n79A, DC\_7C\_n78A, DC\_41C\_n77A will not be kept in the new row.  Note that the PC2 support for DC\_3C\_n41A, DC\_3C\_n78A, DC\_39C\_n41A, DC\_41C\_n79A will be kept although it seems that those are not discussed or requested in the past. |
| R4-2320607(R16)  R4-2320608(R17)  R4-2320609(R18) | CHTTL | [DC\_R16\_1BLTE\_1BNR\_2DL2UL] CR for corrections and re-structures of the MOP table for EN-DC |

## Open issues summary

### Sub-topic 3-1

**Issue 3-1-1: Align 38.101-3 MOP table format as 38.101-1, i.e. one row per UL configuration**

*Moderator note: The purpose of changing MOP table format is to avoid HPUEs are applicable to high order BCs together with low order BC.*

Option 1: Yes

Option 2: No

Recommended WF:

**Issue 3-1-2: Which power classe should be applied for high order BC**

Option 1: it is proposed to keep PC2 of below green highlighted, and only apply PC3 for the yellow highlighted, and remove the red band combination from spec.

* maybe it’s ok to keep at least those introduced in Rel.16 (those highlighted in green in Table 1), as there are existed in the spec for quite a long while.
* But for the newly added PC2 support for the inter-band EN-DC with intra-band components in Rel.17 and Rel.18, maybe it’s better not to keep them to avoid more confusion in the baskets.

Table 1: UL EN-DC configurations with PC2 support in TS 38.101-3 V18.3.0

| EN-DC configuration | Power class 2  (dBm) | Tolerance  (dB) | Power class 3  (dBm) | Tolerance  (dB) | Introduced release (PC2) |
| --- | --- | --- | --- | --- | --- |
| DC\_1A\_n77A  DC\_1A\_n84A\_ULSUP-TDM\_n77A | 266 | +2/-3 | 23 | +2/-3 | Rel.18 |
| DC\_1A\_n78A  DC\_1A\_n84A\_ULSUP-TDM\_n78A | 266 | +2/-3 | 23 | +2/-3 | Rel.17 |
| DC\_3A\_n41A,  DC\_3C\_n41A,  DC\_3C\_n41A, | 266 | +2/-3 | 23 | +2/-3 | Rel.16 |
| DC\_3A\_n77A  DC\_3C\_n77A | 266 | +2/-3 | 23 | +2/-3 | Rel.18 |
| DC\_3A\_n78A  DC\_3C\_n78A | 266 | +2/-3 | 23 | +2/-3 | Rel.16 |
| DC\_3A\_n79A  DC\_3C\_n79A | 266 | +2/-3 | 23 | +2/-3 | Rel.18 |
| DC\_7A\_n78A  DC\_7C\_n78A | 266 | +2/-3 | 23 | +2/-3 | Rel.17 |
| DC\_39A\_n41A  DC\_39C\_n41A | 265 | +2/-3 | 23 | +2/-3 | Rel.16 |
| DC\_39A\_n79A | 265 | +2/-3 | 23 | +2/-3 | Rel.16 |
| DC\_41A\_n77A  DC\_41C\_n77A | 266,8 | +2/-3 | 23 | +2/-3 | Rel.18 |
| DC\_41A\_n79A  DC\_41C\_n79A | 266,8 | +2/-3 | 23 | +2/-3 | Rel.16 |
| DC\_66A\_n78A  DC\_66A-66A\_n78A | 266 | +2/-3 | 23 | +2/-3 | Rel.18 |

*Moderator note: The CRs are based on above table, collecting comments on the table then check CRs.*

### CRs

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc number** | **Company** | **Comments** | **Recommendation** |
| R4-2320607(R16) | CHTTL | [DC\_R16\_1BLTE\_1BNR\_2DL2UL] CR for corrections and re-structures of the MOP table for EN-DC |  |
| R4-2320608(R17) | CHTTL | [DC\_R16\_1BLTE\_1BNR\_2DL2UL] CR for corrections and re-structures of the MOP table for EN-DC |  |
| R4-2320609(R18) | CHTTL | [DC\_R16\_1BLTE\_1BNR\_2DL2UL] CR for corrections and re-structures of the MOP table for EN-DC |  |

# Harmonic mixing MSD (2)

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2319864 | Huawei | [NR\_newRAT-Core] Discussion on how to specify the MSD due to harmonic mixing issue  **Observation 1:** The even order harmonic mixing MSD on DL bands below 1GHz were specified without any technical analysis. And it’s contradicted with LTE specification logically.  **Proposal 1:** In order to align with LTE spec as much as possible, it’s proposed to remove the MSD test configurations due to 2nd and 4th order harmonic mixing in victim bands below 1.7GHz when the aggressor band is power class 3. |
| R4-2319865(R15)  CAT-A:  R4-2319866  R4-2319867  R4-2319868 | Huawei | [NR\_newRAT-Core] CR for 38.101-3 to maintain the new table format for MSD due to harmonic mixing issue |

## Open issues summary

### Sub-topic 4-1

**Issue 4-1-1: Whether to remove the MSD test configurations due to 2nd and 4th order harmonic mixing in victim bands below 1.7GHz when the aggressor band is PC3**

*Moderator note: RAN4#108 agreement “harmonic mixing 4th order could be considered for UL1/DL4”.*

Option 1: Yes

* There is no degradation case in LTE spec for 1UL/2DL and 1UL/4DL cases for victim bands below 1.7GHz.
* For NR, the even order harmonic mixing MSD on DL bands below 1GHz were specified without any technical analysis. And it’s contradicted with LTE specification logically.
* R16 agreement: MSD is considered for 2nd harmonic mixing with the aggressor fundamental frequency of uplink when victim downlink frequency is above 1.7GHz

Option 2: No

Recommended WF:

### CRs

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc number** | **Company** | **Comments** | **Recommendation** |
| R4-2319865(R15)  CAT-A:  R4-2319866  R4-2319867  R4-2319868 | Huawei | [NR\_newRAT-Core] CR for 38.101-3 to maintain the new table format for MSD due to harmonic mixing issue  *Moderator note: it depends on discussion outcome of R4-2319864* |  |

# 38.307 working approaches (1)

## Contributions summary

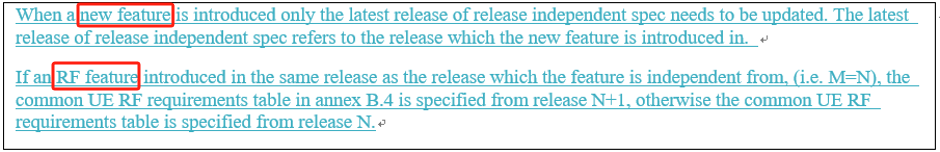
|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| R4-2319863 | Huawei | **[Release independence] Discussion on how to comprehend and implement Requirements on User Equipments (UEs) Supporting a release-independent frequency band in 38.307**  **Observation 1: Different draft ways in TS 38.307 can be found for *Shared spectrum access operating bands* and *UL MIMO operating bands*.**  **For *Shared spectrum access operating bands,* it seems that option B or option A-2 is used.**  **For *UL MIMO operating bands,* it seems that option A-1 is used.**  **Observation 2: In the following paragraph introduced in CR [5],** the “***new feature***” means general feature, e.g. ***Shared spectrum access***and ***UL MIMO***, and “***RF feature***” means ***Shared spectrum access operating bands*** and ***UL MIMO operating bands*.**    **Proposal 1: If the observation 2 is correct, the following problems for current option A-2 method need to be addressed.**  **Firstly, when a general new feature (e.g. UL MIMO/) is introduced in Rel-15, during Rel-15 performance phase, companies can’t predict whether there is a demand on UE supporting UL MIMO RF requirements in a release independent band in the future release. The similar issue came for the new feature “*Shared spectrum access*”*,* that’s why Rel-16 NR-U maintenance CR [8] and Rel-17 NR-U CR [9] were agreed together in Rel-17 phase when NR-U band n102 was introduced.**  **Secondly, due to the unpredictability of a release independent band, option A-2 will fall back to option B (When a new feature is introduced, all of the releases of release independent spec are updated, starting from the release which the feature is release independent from.) That means CR to the previous frozen release can’t be avoided.**  **Thirdly, it’s unclear whether some CRs to the frozen release should be provided under the maintenance WI (new feature: Rel-16 NR-U) or under the performance WI code (RF feature: Rel-17 NR-U band n102).**  **Fourthly, in order to avoid the CR to previous frozen release and follow current wordings of TS 38.307, when every feature (e.g. Rel-18 ATG, UAV and Rel-18 ka band NTN) is introduced, the latest release independent spec which refers to the release which the new feature is introduced in should be updated.**  **Proposal 2: the release independent features of TS 38.307 are only related to the additional NR operating bands and power classes which were approved by TSG-RAN with a clear objective instead of other general features.**  **Proposal 3: Since CRs to previous frozen release will cause some problems and misunderstanding about version control, it’s proposed not to introduce some CRs to previous frozen release under the open release WI code.**  **Proposal 4: Working group can trade-off the following solutions.**  **Modified Option A-1:**  In order to follow the version control rule, it’s proposed to introduce the fulfilled requirements during the open release of TS 38.307 under a performance WI code only when **a release independent band** is introduced. (For example, band n102 is a release independent band for NR-U introduced in Rel-17, but band n46 and n96 are exemplary bands under Rel-16 NR-U. Thus, the fulfilled requirements for NR-U operating bands should be introduced in Rel-17 TS 38.307.)  **Modified Option A-2:**  **Two step methods:**  **Step 1**: In order to follow the version control rule, it’s proposed to introduce an **“empty”** table for release independent bands during the open release of TS 38.307 under a performance WI code only when the **exemplary bands** are introduced together in the same open release. As companies can’t predict whether there is a release independent band in the future release, a clear performance objective for TS 38.307 should be specified in WI for the potential release independent bands in the future. (For example, an **“empty”** table for release independent bands can be introduced in Rel-16 TS 38.307 when exemplary bands n46 and n96 were introduced under Rel-16 NR-U.)  **Step 2**: In order to follow the version control rule, it’s proposed to introduce the fulfilled requirements during the open release of TS 38.307 under a performance WI code only when **a release independent band** is introduced. (For example, band n102 is a release independent band for NR-U introduced in Rel-17, but band n46 and n96 are exemplary bands under Rel-16 NR-U. Thus, the fulfilled requirements for NR-U operating bands should be introduced in Rel-17 TS 38.307.) |

## Open issues summary

### Sub-topic 5-1

**Issue 5-1-1: It the following understanding of “new feature” and “RF feature” correct?**

* The “***new feature***” means general feature, e.g. ***Shared spectrum access***and ***UL MIMO***,
* and “***RF feature***” means ***Shared spectrum access operating bands*** and ***UL MIMO operating bands*.**



Option 1: Yes

Option 2: No

Recommended WF:

**Issue 5-1-2: Comments collection on below proposal**

**Proposal 2:** the release independent features of TS 38.307 are only related to the additional NR operating bands and power classes which were approved by TSG-RAN with a clear objective instead of other general features.

**Proposal 3:** Since CRs to previous frozen release will cause some problems and misunderstanding about version control, it’s proposed not to introduce some CRs to previous frozen release under the open release WI code.

**Issue 5-1-3: Comments collection on below proposal**

**Proposal 1: If the above understanding of “new feature” and “RF feature” is correct, the following problems for current option A-2 method need to be addressed.**

* **Firstly,** when a general new feature (e.g. UL MIMO/) is introduced in Rel-15, during Rel-15 performance phase, companies can’t predict whether there is a demand on UE supporting UL MIMO RF requirements in a release independent band in the future release. The similar issue came for the new feature “*Shared spectrum access*”*,* that’s why Rel-16 NR-U maintenance CR [8] and Rel-17 NR-U CR [9] were agreed together in Rel-17 phase when NR-U band n102 was introduced.
* **Secondly,** due to the unpredictability of a release independent band, option A-2 will fall back to option B (When a new feature is introduced, all of the releases of release independent spec are updated, starting from the release which the feature is release independent from.) That means CR to the previous frozen release can’t be avoided.
* **Thirdly,** it’s unclear whether some CRs to the frozen release should be provided under the maintenance WI (new feature: Rel-16 NR-U) or under the performance WI code (RF feature: Rel-17 NR-U band n102).
* **Fourthly,** in order to avoid the CR to previous frozen release and follow current wordings of TS 38.307, when every feature (e.g. Rel-18 ATG, UAV and Rel-18 ka band NTN) is introduced, the latest release independent spec which refers to the release which the new feature is introduced in should be updated.

**Issue 5-1-4: Comments collection on below proposal**

**Proposal 4: Working group can trade-off the following solutions.**

**Modified Option A-1:**

In order to follow the version control rule, it’s proposed to introduce the fulfilled requirements during the open release of TS 38.307 under a performance WI code only when **a release independent band** is introduced. (For example, band n102 is a release independent band for NR-U introduced in Rel-17, but band n46 and n96 are exemplary bands under Rel-16 NR-U. Thus, the fulfilled requirements for NR-U operating bands should be introduced in Rel-17 TS 38.307.)

**Modified Option A-2:**

**Two step methods:**

**Step 1**: In order to follow the version control rule, it’s proposed to introduce an **“empty”** table for release independent bands during the open release of TS 38.307 under a performance WI code only when the **exemplary bands** are introduced together in the same open release. As companies can’t predict whether there is a release independent band in the future release, a clear performance objective for TS 38.307 should be specified in WI for the potential release independent bands in the future. (For example, an **“empty”** table for release independent bands can be introduced in Rel-16 TS 38.307 when exemplary bands n46 and n96 were introduced under Rel-16 NR-U.)

**Step 2**: In order to follow the version control rule, it’s proposed to introduce the fulfilled requirements during the open release of TS 38.307 under a performance WI code only when **a release independent band** is introduced. (For example, band n102 is a release independent band for NR-U introduced in Rel-17, but band n46 and n96 are exemplary bands under Rel-16 NR-U. Thus, the fulfilled requirements for NR-U operating bands should be introduced in Rel-17 TS 38.307.)

# CRs for 38.101-1 (19)

## CRs

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc** | **Company** | **Title/Comments** | **Recommendation** |
| R4-2318237(R15)  CAT-A:  R4-2318238  R4-2318239  R4-2318240 | Qualcomm | Fc terminology update (38101-1) |  |
| R4-2318395(R15) | Qualcomm | UL MIMO Spurious emissions per UE (38101-1)  *Moderator note: only changes R15.* |  |
| R4-2320902(R16)  CAT-A:  R4-2318246  R4-2318247 | Qualcomm | CR for Intra-band UL CA MPR clarification |  |
| R4-2318746(R16)  CAT-A:  R4-2318747  R4-2318748 | Apple | CR to TS38.101-1 Rel-16 CAT-F: On corrections for NR-U A-MPR requirements  *Moderator note: in cover page it should be 38.101-1 instead of 38.104.* |  |
| R4-2318754(R15)  CAT-A:  R4-2318755  R4-2318756  R4-2318757 | Apple | [NR\_newRAT-Core] CR for TS 38.101-1 Rel-15: Introducing missing MSD for harmonic mixing  *Moderator note: introduce 5th order harmonic mixing for CA\_n28A-n78A with PC3, and analysis is in R4-2318753.* |  |
| R4-2318888(R16)  CAT-A:  R4-2318889  R4-2318890 | Xiaomi | CR for Rel-16 38.101-1 to correct the general limit for in-band emissions shared spectrum channel access. |  |
| R4-2319016(R15)  CAT-A:  R4-2319017  R4-2319018  R4-2319019 | NTT DOCOMO | [NR\_newRAT] CR for clarification on applicability of Rx antenna number for Rx requirements for TS 38.101-1 |  |
| R4-2319166(R16)  CAT-A:  R4-2319167 | Nokia | Addition of 30 kHz SCS for Sync Raster for Band n53  *Moderator note: 30 kHz SCS to band n53 was initially introduced in Rel-18. Here it introduces 30khz also to Rel-16. Is there no NBC issue?* |  |
| R4-2319403(R16)  CAT-A:  R4-2319404  R4-2319418 | SoftBank | [NR\_n41\_BW-Core] Support of PC1.5 for n41 30MHz in Japan (R16)  *Moderator note: it confirms the values in [] from last meeting.* |  |
| R4-2319451(R16)  R4-2319452(R17)  CAT-A:  R4-2319453 | Anritsu | [NR\_n30-Core] CR to correct the measurement BW for Additional SEM for NS\_21  *Moderator note: to align with Canadian regulations in RP-221047 and R4-2119840?* |  |
| R4-2319454(R15)  CAT-A:  R4-2319455  R4-2319456  R4-2319457 | Anritsu | [NR\_newRAT-Core] CR to remove the word capable in power class 3 capable UE |  |
| R4-2319458(R16)  CAT-A:  R4-2319459  R4-2319460 | Anritsu | [NR\_RF\_FR1-Core] CR concerning the RMS average used in EVM measurement with transient period |  |
| R4-2319597(R16)  CAT-A:  R4-2319598  R4-2319599 | Ericsson | [NR\_n38\_BW2] Clarify A-MPR values for NS\_44 - Rel16 |  |
| R4-2319605(R16)  CAT-A:  R4-2319606  R4-2319607 | ZTE | [NR\_CADC\_R16\_2BDL\_xBUL] CR for TS 38.101-1 to correct inter-band NR DC configuration table (R16) |  |
| R4-2319869(R15)  CAT-A:  R4-2319870  R4-2319871  R4-2319872 | Huawei | [NR\_newRAT-Core] CR for 38.101-1 to clarify the applicable bands for additional UTRA ACLR requirements  *Moderator note: R4-2319870 should be CAT-F.* |  |
| R4-2320096(R16)  R4-2320097(R17)  CAT-A:  R4-2320098 | ZTE | [NR\_RF\_FR1\_enh-Core] Correct the P-MPRc terms in the Pcmax equation for intra-band contiguous CA |  |
| R4-2320628(R15)  CAT-A:  R4-2320629  R4-2320630  R4-2320631 | Nokia | [NR\_newRAT] CR to 38.101-1 on FRC correction |  |
| R4-2320884(R15)  CAT-A:  R4-2320885  R4-2320886  R4-2320887 | Ericsson | Correction of ?T\_RxSRS for SRS resource set consisting of two SRS ports |  |
| R4-2320974(R16)  CAT-A:  R4-2320976  R4-2320977 | Skyworks Solutions, Inc., Nokia | CR to TS 38.101-1 Rel-16 Corrections to UE co-existence requirements |  |

# CRs for 38.101-2 (6)

## CRs

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| --- | --- | --- | --- |
| **T-doc** | **Company** | **Title/Comments** | **Recommendation** |
| R4-2318241(R15)  CAT-A:  R4-2318242  R4-2318243  R4-2318244 | Qualcomm | Fc terminology update (38101-2) |  |
| R4-2318880(R15) | Xiaomi | CR for Rel-15 38.101-2 to correct some errors in the clause of the spectrum emission mask for CA. |  |
| R4-2318881(R16)  CAT-A:  R4-2318882  R4-2318883 | Xiaomi | CR for Rel-16 38.101-2 to correct some errors in the clause of the spectrum emission mask for CA. |  |
| R4-2318884(R15)  CAT-A:  R4-2318885  R4-2318886  R4-2318887 | Xiaomi | CR for Rel-15 38.101-2 to introduce the missed sub-clause 6.5A.2.2 as void |  |
| R4-2318990(R15)  CAT-A:  R4-2318991  R4-2318992  R4-2318993 | vivo | CR to 38.101-2 on adding missing definition of EIS spherical coverage link angle(Rel-15) |  |
| R4-2319424(R16)  R4-2319425(R17)  CAT-A:  R4-2319426 | Ericsson | [NR\_RF\_FR2\_req\_enh] Removal of interlaced channel bandwidths for CA BW class fallback groups 1-4  *Moderator note: limit FR2 CA BW class to only non-interlaced bandwidths* |  |

# CRs for 38.101-3 (6)

## CRs

|  |  |  |  |
| --- | --- | --- | --- |
| **T-doc** | **Company** | **Title/Comments** | **Recommendation** |
| R4-2318470(R15) | Huawei, HiSilicon | [NR\_newRAT-Core] Correction to 6.5B.3.3.2 (Rel-15)  *Moderator note: The protected bands are removed in Rel-16 and forward TS 38.101-3, therefore no cat-A CRs are needed.* |  |
| R4-2318825(R15)  CAT-A:  R4-2318826  R4-2318827  R4-2318828(R18)  R4-2318829(R18) | Qualcomm | [NR\_newRAT-Core] Clarifications for FR2 testing with NR-DC and NR-CA  *Moderator note: there are two R18 CAT-A CRs, and* *R4-2318829 will be withdrawn.* |  |
| R4-2319412 | Samsung | Rel16 Cat F CR for 38.101-3 Correct the clause indication for non-collocated deployment |  |
| R4-2319413 | Samsung | Rel17 Cat F CR for 38.101-3 Correct the clause indication and the typo for non-collocated deployment |  |
| R4-2319762(R15)  CAT-A:  R4-2319763  R4-2319764  R4-2319765 | Samsung, CHTTL | Rel15 Cat F CR for 38.101-3 Add a general note to each configuration tables to alleviate the issue of missing mandatory simultaneous RxTx note (38101-3)  *Moderator note: does it overlap with the general description in clause 5.5B.1?* |  |
| R4-2319877(R15)  CAT-A:  R4-2319878  R4-2319879  R4-2319880 | Huawei | [NR\_newRAT-Core] CR for 38.101-3 to improve the wordings of the note 15 on simulataneous Rx/Tx capability for Band 42 and n77 (38101-3) |  |

# CRs for 38.307 (1)

## CRs

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| --- | --- | --- | --- |
| **T-doc** | **Company** | **Title/Comments** | **Recommendation** |
| R4-2320090(R16)  CAT-A:  R4-2320091 | ZTE | [NR\_newRAT-Core] Common UE RF requirements for 4Rx |  |