**3GPP TSG-RAN WG4 Meeting #100-e R4-210xxxx**

**Online Meeting, 16 August – 27 August, 2021**

**Third Generation Partnership Project (3GPP™)**

**DRAFT Meeting Report  
for  
TSG RAN WG4  
meeting: 99-e**

**Electronic Meeting, Online, 19/05/2021 to 27/05/2021**

Report generated on Friday, 2021-05-14 15:45 UTC

## 1 Opening of the E-meeting

The Chairman Xizeng Dai (Huawei) opened the meeting on RAN4 reflector on 19/05/2021.

Intellectual Property Rights Declaration Policy

The attention of the delegates to the meeting of this Technical Specification Group was drawn to the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of.

The delegates were asked to take note that they were thereby invited:

- to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.

- to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Information Statement and the Licensing declaration forms.

Statement regarding competition law

The attention of the delegates to the meeting was drawn to the fact that 3GPP activities were subject to all applicable antitrust and competition laws and that compliance with said laws was therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and were invited to seek any clarification needed with their legal counsel. The leadership would conduct the present meeting with impartiality and in the interests of 3GPP. Delegates were reminded that timely submission of work items in advance of TSG/WG meetings was important to allow for full and fair consideration of such matters.

Meeting arrangements

The meeting was conducted on three parallel sessions; Main session, RRM session and BS RF Test Demod session. The Main session was chaired by RAN4 Chair Xizeng Dai (Huawei), RRM session was chaired by RAN4 Vice Chair Andrey Chervyakov (Intel) and BS RF Test Demod session was chaired by RAN4 ViceChair Haijie Qiu (Samsung). The sessions were further broken down into separate email threads to address specific technical topics lead by assigned discussion moderators. Webinar sessions were used to summarize progress, resolve controversial issues and decide way forward.

## 2 Approval of the agenda

**R4-2107600 RAN4#98-bis-e Meeting Report**

*Type: report For: Approval  
 Source: ETSI MCC*

**Decision:** The document was **Approved**.

**R4-2107601 Agenda for RAN4#99-e**

*Type: agenda For: Approval  
 Source: RAN4 Chair (Huawei)*

**Decision:** The document was **Approved**.

**R4-2107602 RAN4#99-e E-Meeting Arrangements and Guidelines**

*Type: other For: Approval  
 Source: RAN4 Chair (Huawei)*

**Decision:** The document was **Approved**.

**R4-2107603 RAN4 Meeting Efficiency Improvements**

*Type: other For: Approval  
 Source: RAN4 Chair (Huawei)*

**Decision:** The document was **withdrawn**.

## 3 Letters / reports from other groups / meetings

R4-2107604 Reply LS on uplink timing alignment for small data transmissions RAN1

R4-2107605 Further Reply LS on power control for NR-DC RAN1

R4-2107606 Reply LS on timing of neighbor cell RSS-based measurements RAN1

R4-2107608 LS to RAN4 on maximum UE conducted power and maximum UE EIRP for operation in the 52.6 – 71 GHz band RAN1

R4-2107609 Reply LS on temporary RS for efficient SCell activation in NR CA RAN1

R4-2107610 LS on UE/TRP Tx/Rx Timing Errors RAN1

R4-2107611 Reply LS on PUCCH and PUSCH repetition RAN1

R4-2107612 LS on updated Rel-16 RAN1 UE features lists for NR after RAN1#104bis-e RAN1

R4-2107613 Reply LS on Rel-17 uplink Tx switching RAN1

R4-2107614 LS on Timing Assumption for Inter-Cell DL Measurement RAN1

R4-2107615 Reply LS on TCI state indication at Direct SCell activation RAN2

R4-2107616 Reply LS to RAN4 on the capability of transparent TxD RAN2

R4-2107617 LS on BCS for contiguous and non-contiguous intra-band (NG)EN-DC RAN2

R4-2107618 Reply LS on timing of neighbor cell RSS-based measurements RAN2

R4-2107619 Reply LS related to RSS based RSRQ for LTE-MTC RAN2

R4-2107620 LS on the Intra-band and Inter-band (NG)EN-DC/NE-DC Capabilities RAN2

R4-2107621 Reply LS on single-uplink operation in more than one band pair of a band combination RAN2

R4-2107622 Reply LS to RAN4 on handover with PSCell RAN2

R4-2107623 LS on fallback applicability for UE FeatureSetDownLinkPerCC capability fields RAN2

R4-2107624 Reply LS on Introduction of DL 1024QAM for NR RAN2

**R4-2107604 Reply LS on uplink timing alignment for small data transmissions (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2102286, to RAN2, cc RAN4***Decision:** The document was **Noted**.

**R4-2107605 Further Reply LS on power control for NR-DC (RAN1) (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104018, to RAN4, cc RAN2***Decision:** The document was **Noted**.

**R4-2107606 Reply LS on timing of neighbor cell RSS-based measurements (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104033, to -, cc -***Decision:** The document was **Noted**.

**R4-2107608 LS to RAN4 on maximum UE conducted power and maximum UE EIRP for operation in the 52.6 – 71 GHz band** **(RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104061, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107609 Reply LS on temporary RS for efficient SCell activation in NR CA (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104110, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107610 LS on UE/TRP Tx/Rx Timing Errors (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104111, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107611 Reply LS on PUCCH and PUSCH repetition (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104119, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107612 LS on updated Rel-16 RAN1 UE features lists for NR after RAN1#104bis-e (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104121, to RAN4, RAN2, cc -***Decision:** The document was **Noted**.

**R4-2107613 Reply LS on Rel-17 uplink Tx switching** **(RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104137, to RAN4, cc RAN2***Decision:** The document was **Noted**.

**R4-2107614 LS on Timing Assumption for Inter-Cell DL Measurement (RAN1)**

*Type: LS in For: Information  
 Original outgoing LS: R1-2104142, to RAN4, cc RAN2***Decision:** The document was **Noted**.

**R4-2107615 Reply LS on TCI state indication at Direct SCell activation (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104326, to RAN4, RAN1, cc -***Decision:** The document was **Noted**.

**R4-2107616 Reply LS to RAN4 on the capability of transparent TxD (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN4, cc RAN1, RAN5***Decision:** The document was **Noted**.

**R4-2107617 LS on BCS for contiguous and non-contiguous intra-band (NG)EN-DC (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104357, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107618 Reply LS on timing of neighbor cell RSS-based measurements (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104391, to RAN4, RAN1, cc -***Decision:** The document was **Noted**.

**R4-2107619 Reply LS related to RSS based RSRQ for LTE-MTC (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104392, to RAN4, RAN1, cc -***Decision:** The document was **Noted**.

**R4-2107620 LS on the Intra-band and Inter-band (NG)EN-DC/NE-DC Capabilities (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104550, to RAN4, RAN1, cc -***Decision:** The document was **Noted**.

**R4-2107621 Reply LS on single-uplink operation in more than one band pair of a band combination (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104557, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107622 Reply LS to RAN4 on handover with PSCell (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104580, to RAN4, cc -***Decision:** The document was **Noted**.

**R4-2107623 LS on fallback applicability for UE FeatureSetDownLinkPerCC capability fields (RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104603, to RAN1, cc RAN4***Decision:** The document was **Noted**.

**R4-2107624 Reply LS on Introduction of DL 1024QAM for NR** **(RAN2)**

*Type: LS in For: Information  
 Original outgoing LS: R2-2104645, to RAN4, RAN1, cc -***Decision:** The document was **Noted**.

**R4-2108785 3GPP’s activities related to WRC-19 Resolutions (ITU-R WP7C)**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN4, RAN, cc -***Decision:** The document was **Noted**.

## 4 Rel-15 and previous release maintenance

### 4.1 Rel-15 New radio access technology

#### 4.1.1 System Parameters Maintenance

**Email discussion summary of [99-e][101] NR\_NewRAT\_SysParameters, AI 4.1.1 – Aijun Cao**

**R4-2107628 Email discussion summary for [99-e][101]** **NR\_NewRAT\_SysParameters**

*Type: Other For: Information  
 Source: Moderator (ZTE)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**CA carrier spacing**

**CR 38.101-1**

**R4-2109951 Correction to nominal CA carrier spacing (no common SCS)**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0794 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the nominal carrier spacing when there is no common mu (SCS) value

**Decision:** The document was **not treated**.

**R4-2109952 Correction to nominal CA carrier spacing (no common SCS)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0795 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the nominal carrier spacing when there is no common mu (SCS) value

**Decision:** The document was **not treated**.

**R4-2109953 Correction to nominal CA carrier spacing (no common SCS)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0796 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the nominal carrier spacing when there is no common mu (SCS) value

**Decision:** The document was **not treated**.

**R4-2111373 CR for 38.101-1 channel space for CA\_Rel15**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0858 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111374 CR for 38.101-1 channel space for CA\_Rel16**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0859 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111375 CR for 38.101-1 channel space for CA\_Rel17**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0860 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**38.101-2**

**R4-2111376 CR for 38.101-2 channel space for CA\_Rel15**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0400 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111377 CR for 38.101-2 channel space for CA\_Rel16**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0401 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111378 CR for 38.101-2 channel space for CA\_Rel17**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0402 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**38.104**

**R4-2109954 Correction to nominal CA carrier spacing (no common SCS)**

*Type: CR For: Agreement  
 38.104 v15.13.0 CR-0315 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the nominal carrier spacing when there is no common mu (SCS) value

**Decision:** The document was **not treated**.

**R4-2109955 Correction to nominal CA carrier spacing (no common SCS)**

*Type: CR For: Agreement  
 38.104 v16.7.0 CR-0316 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the nominal carrier spacing when there is no common mu (SCS) value

**Decision:** The document was **not treated**.

**R4-2109956 Correction to nominal CA carrier spacing (no common SCS)**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0317 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the nominal carrier spacing when there is no common mu (SCS) value

**Decision:** The document was **not treated**.

**LS**

**R4-2111372 discussion on Reply LS on CA nominal channel**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 4.1.2 UE RF requirements maintenance

**Email discussion summary of [99-e][102] NR\_NewRAT\_SysParameters, AI 4.1.2 –Hisashi Onozawa**

**R4-2107629 Email discussion summary for [99-e][102]** **NR\_NewRAT\_UE\_RF\_R15**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

##### 4.1.2.1 [FR1] Maintenance for 38.101-1

**Topic #1 RAN5 LS reply: Ambiguity in deciding T\_L,C**

**R4-2108926 Reply LS on ambiguity in deciding TL,C**

*Type: LS out For: Approval  
 to RAN5  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110436 Draft reply LS on ambiguity in deciding TL,C**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110389 Discussion and draft Reply LS on ambiguity in deciding TL,C**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Related CRs**

**R4-2108927 CR on ambiguity in deciding TL,C R15 CATF**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0741 rev Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2108928 CR on ambiguity in deciding TL,C R16 CATA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0742 rev Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2108929 CR on ambiguity in deciding TL,C R17 CATA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0743 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110421 CR for 38.101-1 clarification on the lower limit of Pumax(Rel-15)**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0817 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110422 CR for 38.101-1 clarification on the lower limit of Pumax(Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0818 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110423 CR for 38.101-1 clarification on the lower limit of Pumax(Rel-17)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0819 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Topic #2: CA/DC NS**

**For 38.101-1**

**R4-2109437 Additional emission requirement issues for CA/DC**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110288 Discussion on applicability of additional emission requirement to CA/DC**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110984 NS applicability for inter-band CA/DC**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109153 Follow-up on additional UE co-ex requirements**

*Type: other For: Approval  
 Source: SoftBank Corp.*

**Abstract:**

This paper is a follow-up of the WF agreed in Jan. meeting on 2 band UL CA/DC, i.e. (1) to clarify additional UE co-ex requirements and (2) to address how current UE co-ex assumptions can be handled.

**Decision:** The document was **not treated**.

**R4-2109140 Clarification on additional emission requirements to 2 band UL CA/DC (R15)**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0761 rev Cat: F (Rel-15)  
  
 Source: SoftBank Corp.*

**Abstract:**

Applicability of additional emission requirements for 2 band CA/DC is clarified.

**Decision:** The document was **not treated**.

**R4-2109143 Clarification on additional emission requirements to 2 band UL CA/DC (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0762 rev Cat: F (Rel-16)  
  
 Source: SoftBank Corp.*

**Abstract:**

Basically the same content as R15 but In R16 NR-DC section was added.

**Decision:** The document was **not treated**.

**R4-2109145 Clarification on additional emission requirements to 2 band UL CA/DC (R17)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0763 rev Cat: A (Rel-17)  
  
 Source: SoftBank Corp.*

**Abstract:**

Mirror CR of R16

**Decision:** The document was **not treated**.

**For 38.101-3 (moved from AI 4.1.2.3 to AI 4.1.2.1)**

**R4-2109146 Clarification on additional emission requirements to 2 band UL CA/DC (R15)**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0527 rev Cat: F (Rel-15)  
  
 Source: SoftBank Corp.*

**Abstract:**

Applicability of additional emission requirements for 2 band CA/DC is clarified. Discussion has been done in R15 NR Maint. Session for 101-1.

**Decision:** The document was **not treated**.

**R4-2109148 Clarification on additional emission requirements to 2 band UL CA/DC (R16)**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0528 rev Cat: A (Rel-16)  
  
 Source: SoftBank Corp.*

**Abstract:**

Mirror of R15 CR

**Decision:** The document was **not treated**.

**R4-2109149 Clarification on additional emission requirements to 2 band UL CA/DC (R17)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0529 rev Cat: F (Rel-17)  
  
 Source: SoftBank Corp.*

**Abstract:**

Basically the same content as R15/R16 but In R17, NE-DC section was added.

**Decision:** The document was **not treated**.

**Topic #3 Maintenance**

**Topic #3-1 UL MIMO EVM**

**R4-2108818 On FR1 2L UL EVM Requirement**

*Type: other For: Agreement  
 Source: Qualcomm Incorporated, Lenovo, Motorola Mobility*

**Abstract:**

2L EVM calculation detail, impact to other tests in transmit modulation quality section

**Decision:** The document was **not treated**.

**R4-2109914 Discussion on FR1 UL MIMO transmit signal quality measurements**

*Type: discussion For: Approval  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108815 CR to 38.101-1: UL MIMO requirements update**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0729 rev Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated, Lenovo, Motorola Mobility*

**Abstract:**

Make 2L EVM requirement consistent with RAN1

**Decision:** The document was **not treated**.

**R4-2108816 CR to 38.101-1: UL MIMO requirements update**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0730 rev Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated, Lenovo, Motorola Mobility*

**Abstract:**

Make 2L EVM requirement consistent with RAN1

**Decision:** The document was **not treated**.

**R4-2108817 CR to 38.101-1: UL MIMO requirements update**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0731 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated, Lenovo, Motorola Mobility*

**Abstract:**

Make 2L EVM requirement consistent with RAN1

**Decision:** The document was **not treated**.

**TX-RX separations**

**R4-2109379 Non-default RX-TX Frequency Separation Values and split band duplexers**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Proposes to add a note to table 5.4.4-1: For bands n28 and n74 that UE may support only the default TX-RX frequency separation value

**Decision:** The document was **not treated**.

**R4-2108790 Split band duplexer exceptions for non-default TX-RX separations**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0724 rev Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2108791 Split band duplexer exceptions for non-default TX-RX separations**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0725 rev Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2108792 Split band duplexer exceptions for non-default TX-RX separations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0726 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Merge RMC tables for 15, 30, 60KHz SCS**

**R4-2108869 Update of FR1 UL RMC tables**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0734 rev Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108870 Update of FR1 UL RMC tables**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0735 rev Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108871 Update of FR1 UL RMC tables**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0736 rev Cat: A (Rel-17)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**Modifying asymmetric UL/DL configurations for n70**

**R4-2108977 Simplification of n70**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0751 rev Cat: F (Rel-17)  
  
 Source: Dish Network*

**Abstract:**

CR R4-2101992 was approved in February, but was not fully implemented in R17 specification. Similar R15 and R16 changes were implemented correctly.

**Decision:** The document was **not treated**.

**Co-exstence requirement for B12, n28, n83**

**R4-2109453 Cleanup for UE co-existence 38.101-1 Rel-15**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0777 rev Cat: F (Rel-15)  
  
 Source: Apple*

Chair: It seems that Cat A CRs are missing

**Decision:** The document was **not treated**.

**Co-existence requirement related to n40/B40 in Japan**

**R4-2109166 CR to TS38.101-1[R15]: Addition of UE co-existence requirements for n40**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0766 rev Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

R15 CAT-F CR to add co-existence requirements for n40.

**Decision:** The document was **not treated**.

**R4-2109167 CR to TS38.101-1[R16]: Addition of UE co-existence requirements for n40**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0764 rev Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R16

**Decision:** The document was **not treated**.

**R4-2109168 CR to TS38.101-1[R17]: Addition of UE co-existence requirements for n40**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0765 rev Cat: A (Rel-17)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R17

**Decision:** The document was **not treated**.

**R4-2109169 CR to TS38.101-3[R15]: Addition of UE co-existence requirements for band 40 and n40**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0530 rev Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

R15 CAT-F CR to add co-existence requirements for B40/n40.

**Decision:** The document was **not treated**.

**R4-2109170 CR to TS38.101-3[R16]: Addition of UE co-existence requirements for band 40 and n40**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0532 rev Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R16

**Decision:** The document was **not treated**.

**R4-2109171 CR to TS38.101-3[R17]: Addition of UE co-existence requirements for band 40 and n40**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0531 rev Cat: A (Rel-17)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R17

**Decision:** The document was **not treated**.

**Power tolerance under close loop power control**

**R4-2111367 CR on MOP for TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0855 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111368 CR on MOP for TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0856 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111369 CR on MOP for TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0857 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**CRs for 38.307**

**R4-2110424 CR for 38.307 to delete the redundant information "duplex mode" for band combinations(Rel-15)**

*Type: CR For: Agreement  
 38.307 v15.8.0 CR-0063 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110425 CR for 38.307 to delete the redundant information "duplex mode" for band combinations(Rel-16)**

*Type: CR For: Agreement  
 38.307 v16.6.0 CR-0064 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110426 CR for 38.307 to delete the redundant information "duplex mode" for band combinations(Rel-17)**

*Type: CR For: Agreement  
 38.307 v17.1.0 CR-0065 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110448 CR to TS 38.307 on the definition of the duplex-mode for the band configurations**

*Type: CR For: Agreement  
 38.307 v15.8.0 CR-0066 rev Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110449 CR to TS 38.307 on the definition of the duplex-mode for the band configurations**

*Type: CR For: Agreement  
 38.307 v16.6.0 CR-0067 rev Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110450 CR to TS 38.307 on the definition of the duplex-mode for the band configurations**

*Type: CR For: Agreement  
 38.307 v17.1.0 CR-0068 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**Delta\_TRxSRS**

**R4-2109258 Clarification on delta\_TRxSRS to Configured transmitted power**

*Type: other For: Approval  
 38.101-1 v CR- rev Cat: (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Clarification of applicability of ?TRxSRS to Configured transmitted power

Chair: Tdoc is missing.

**Decision:** The document was **withdrawn**.

**R4-2109128 Correction of an improper usage of band edge relaxation for MOP**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0758 rev Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **withdrawn**.

##### 4.1.2.2 [FR2] Maintenance for 38.101-2

**Topic#4-1: EESS protection (WRC-19)**

**R4-2110808 R15 WRC-19 remaining issues**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111509 EESS protection requirements after 2024/2027**

*Type: other For: Approval  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**Topic#4-2: RF requirements under ETC**

**R4-2109671 Discussion and draft LS on applicability of RF requirements on extreme tempreture condition**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2111508 FR2 Extreme temperature conditions applicability**

*Type: discussion For: Endorsement  
 Source: Keysight Technologies UK Ltd*

**Decision:** The document was **not treated**.

**R4-2111507 FR2 Extreme Temperature Conditions revision**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0406 rev Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd*

**Decision:** The document was **not treated**.

**Maintenance for 38.101-2**

**P-cmax**

**R4-2108787 P\_cmax fix for the CA applicability**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0351 rev Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2108788 P\_cmax fix for the CA applicability**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0352 rev Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2108789 P\_cmax fix for the CA applicability**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0353 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**P\_min**

**R4-2108819 Discussion on FR2 UE Min. Output Power Requirement**

*Type: other For: Agreement  
 Source: Qualcomm Incorporated*

**Abstract:**

Establish consistency in Pmin specs across single CC, CA and UL MIMO configurations

**Decision:** The document was **not treated**.

**R4-2108820 CR to 38.101-2: P\_min requirements update**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0354 rev Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Make 2L EVM requirement consistent with RAN1

**Decision:** The document was **not treated**.

**R4-2108821 CR to 38.101-2: P\_min requirements update**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0355 rev Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Make 2L EVM requirement consistent with RAN1

**Decision:** The document was **not treated**.

**R4-2108822 CR to 38.101-2: P\_min requirements update**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0356 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Make 2L EVM requirement consistent with RAN1

**Decision:** The document was **not treated**.

**Merge RMC tables with different SCS**

**R4-2108872 Update of FR2 UL RMC tables**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0357 rev Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108873 Update of FR2 UL RMC tables**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0358 rev Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108874 Update of FR2 UL RMC tables**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0359 rev Cat: A (Rel-17)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**Change IBE requirements to the same metrics as other emission measurements.**

**R4-2108875 Update of FR2 UL MIMO transmit signal quality requirements**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0360 rev Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108876 Update of FR2 UL MIMO transmit signal quality requirements**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0361 rev Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108877 Update of FR2 UL MIMO transmit signal quality requirements**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0362 rev Cat: A (Rel-17)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**Correct side conditions for beam correspondence**

**R4-2110151 Beam Correspondence Side Conditions for SSB and CSI-RS**

*Type: discussion For: Approval  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110176 CR to 38.101-2 on side conditions for beam correspondence based on SSB and CSI-RS for n257, n258, n260, n261 (Rel-15)**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0381 rev Cat: F (Rel-15)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110178 CR to 38.101-2 on side conditions for beam correspondence based on SSB and CSI-RS for n257, n258, n260, n261 (Rel-16)**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0382 rev Cat: A (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110150 CR to 38.101-2 on side conditions for beam correspondence based on SSB and CSI-RS for n257, n258, n260, n261 (Rel-17)**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0377 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**LO leakage and IQ image may land outside configured UL and DL CCs**

**R4-2111358 CR on FR2 emission requirements\_r15**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0393 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111359 CR on FR2 emission requirements\_r16**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0394 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111360 CR on FR2 emission requirements\_17**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0395 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Add MBR requirements for UEs support multiple FR2 band**

**R4-2111364 CR on MBR requirement for TS 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0397 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111365 CR on MBR requirement for TS 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0398 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111366 CR on MBR requirement for TS 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0399 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Add definition of CABW in section 3 and remove it in requirement text**

**R4-2111415 CR to 38.101-2: CABW definition addition**

*Type: CR For: Agreement  
 38.101-2 v15.13.0 CR-0403 rev Cat: D (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Editorial CR to add definition of cumulative aggregated BW in section 3

**Decision:** The document was **not treated**.

**R4-2111416 CR to 38.101-2: CABW definition addition**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0404 rev Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Editorial CR to add definition of cumulative aggregated BW in section 3

**Decision:** The document was **not treated**.

**R4-2111417 CR to 38.101-2: CABW definition addition**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0405 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Editorial CR to add definition of cumulative aggregated BW in section 3

**Decision:** The document was **not treated**.

##### 4.1.2.3 Maintenance for 38.101-3

**Topic#5: Intra-band/inter-band EN-DC**

**R4-2110032 Clarification on intraBandENDC-Support and interBandContiguousMRDC**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2109781 Clarification of intra-bandENDC-Support**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

intra-bandENDC-Support is discussed.

**Decision:** The document was **not treated**.

**R4-2110154 Clarifications on intra-band EN-DC combinations**

*Type: other For: Approval  
 38.101-3 v CR- rev Cat: (Rel-15)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110807 R15 intra band EN-DC support**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110982 Intra-band EN-DC contiguous and non-contiguous capability**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111111 Discussion on intra-band EN-DC combination**

*Type: discussion For: Approval  
 Source: Google Inc.*

**Decision:** The document was **not treated**.

**R4-2111353 on intrabandENDC-support IE**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**CR**

**R4-2108803 CR for clarification on interBandContiguousMRDC in TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0514 rev Cat: F (Rel-15)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2109982 CR for clarification on interBandContiguousMRDC in TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0559 rev Cat: A (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2110031 CR for clarification on interBandContiguousMRDC in TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0563 rev Cat: A (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2109782 CR to clarify intra-bandENDC-Support**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0547 rev Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Clarify intra-bandENDC-Support

**Decision:** The document was **not treated**.

**R4-2109783 CR to clarify intra-bandENDC-Support**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0548 rev Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Clarify intra-bandENDC-Support

**Decision:** The document was **not treated**.

**R4-2109784 CR to clarify intra-bandENDC-Support**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0549 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Clarify intra-bandENDC-Support

**Decision:** The document was **not treated**.

**R4-2110155 CR for TS 38.101-3: Corrections for intra-band EN-DC configurations**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0564 rev Cat: F (Rel-15)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110156 CR for TS 38.101-3: Corrections for intra-band EN-DC configurations**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0565 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110157 CR for TS 38.101-3: Corrections for intra-band EN-DC configurations**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0566 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**Topic#6: TS38.101-3 maintenance**

**Added missing references to other specifications**

**R4-2108878 Corrections to EN-DC spurious emission tables**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0517 rev Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108879 Corrections to EN-DC spurious emission tables**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0518 rev Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108880 Corrections to EN-DC spurious emission tables**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0519 rev Cat: A (Rel-17)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**Definition of CIM5**

**R4-2109155 On the definition of CIM5**

*Type: other For: Approval  
 Source: SoftBank Corp.*

**Abstract:**

This paper is intended to discuss the definition of CIM5 as there are two different definitions of the CIM.

**Decision:** The document was **not treated**.

**R4-2109154 On the definition of CIM5**

*Type: other For: Approval  
 Source: SoftBank Corp.*

**Abstract:**

This paper is intended to discuss the definition of CIM5 as there are two different definitions of the CIM.

**Decision:** The document was **withdrawn**.

**Clean-up for co-existence requirements**

**R4-2109455 Cleanup for UE co-existence 38.101-3 Rel-15**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0534 rev Cat: F (Rel-15)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**Correct the ΔTIB,c description for FR1-FR2 inter-band CA combination**

**R4-2110445 CR to TS38.101-3: Correction on ?TIB,c description for FR1-FR2 CA**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0572 rev Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110446 CR to TS38.101-3: Correction on ?TIB,c description for FR1-FR2 CA**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0573 rev Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110447 CR to TS38.101-3: Correction on ?TIB,c description for FR1-FR2 CA**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0574 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**Correct UL configurations of intra-band EN-DC**

R4-2109968 and R4-2109969 are moved from AI 5.1.7.2 to AI 4.1.2.3

**R4-2109968 Correction to band combinations for intra-band EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0557 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct UL configurations of intra-band EN-DC not compatible with the fallback specification in 38.306 and account for possible configurations using intraBandENDC-support indication

**Decision:** The document was **not treated**.

**R4-2109969 Correction to band combinations for intra-band EN-DC**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0558 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to correct UL configurations of intra-band EN-DC not compatible with the fallback specification in 38.306 and account for possible configurations using intraBandENDC-support indication

**Decision:** The document was **not treated**.

#### 4.1.3 UE EMC requirements maintenance

#### 4.1.4 BS RF requirements maintenance

##### 4.1.4.1 General

##### 4.1.4.2 TX/RX requirements maintenance (38.104)

##### 4.1.4.3 MSR specifications maintenance

#### 4.1.5 BS conformance testing Maintenance

##### 4.1.5.1 General

##### 4.1.5.2 Conducted conformance testing (38.141-1)

##### 4.1.5.3 Radiated conformance testing (38.141-2)

##### 4.1.5.4 eAAS specifications maintenance

#### 4.1.6 BS EMC requirements Maintenance

#### 4.1.7 RRM core requirements maintenance (38.133/36.133)

#### 4.1.8 RRM performance requirements maintenance (38.133/36.133)

#### 4.1.9 Demodulation and CSI requirements maintenance (38.101-4/38.104)

##### 4.1.9.1 UE demodulation requirements

##### 4.1.9.2 CSI requirements

##### 4.1.9.3 BS demodulation requirements

#### 4.1.10 Positioning specs maintenance (36.171, 37.171 and 38.171)

#### 4.1.11 Testability Maintenance (38.810)

### 4.2 LTE maintenance (up to Rel15)

#### 4.2.1 BS RF requirements

#### 4.2.2 UE RF requirements

**Email discussion summary of [99-e][104] LTE\_Maintenance, AI 4.2.2 & AI 5.2.2.2 – Laurent Noel**

**R4-2107631 Email discussion summary for [99-e][104]** **LTE\_Maintenance**

*Type: Other For: Information  
 Source: Moderator (Skyworks)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**Topic #2: Spurious emission clean-up for UE coexistence tables**

**Co-existence requirements**

**R4-2109451 Cleanup for UE co-existence 36.101 Rel-15**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5772 rev Cat: F (Rel-15)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109452 Cleanup for UE co-existence 36.101 Rel-16**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5773 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109457 Cleanup for UE co-existence 36.101 Rel-17**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5774 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**Co-existence requirements for Band 40**

**R4-2109156 CR to TS 36.101[R8]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v8.29.0 CR-5770 rev Cat: F (Rel-8)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

R8 CAT-F CR to add co-existence requirements for B40.

**Decision:** The document was **not treated**.

**R4-2109157 CR to TS 36.101[R9]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v9.25.0 CR-5762 rev Cat: A (Rel-9)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R9

**Decision:** The document was **not treated**.

**R4-2109158 CR to TS 36.101[R10]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v10.29.0 CR-5771 rev Cat: A (Rel-10)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R10

**Decision:** The document was **not treated**.

**R4-2109159 CR to TS 36.101[R11]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v11.26.0 CR-5763 rev Cat: A (Rel-11)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R11

**Decision:** The document was **not treated**.

**R4-2109160 CR to TS 36.101[R12]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v12.26.0 CR-5764 rev Cat: A (Rel-12)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R12

**Decision:** The document was **not treated**.

**R4-2109161 CR to TS 36.101[R13]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v13.20.0 CR-5765 rev Cat: A (Rel-13)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R13

**Decision:** The document was **not treated**.

**R4-2109162 CR to TS 36.101[R14]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v14.18.0 CR-5766 rev Cat: A (Rel-14)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R14

**Decision:** The document was **not treated**.

**R4-2109163 CR to TS 36.101[R15]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5767 rev Cat: A (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R15

**Decision:** The document was **not treated**.

**R4-2109164 CR to TS 36.101[R16]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5768 rev Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R16

**Decision:** The document was **not treated**.

**R4-2109165 CR to TS 36.101[R17]: Addition of UE co-existence requirements for band 40**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5769 rev Cat: A (Rel-17)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

CAT-A CR for R17

**Decision:** The document was **not treated**.

**Topic #3: NB-IoT**

**TDD RMC**

**R4-2108892 Correction to NB-IoT TDD RMCs**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5740 rev Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108893 Correction to NB-IoT TDD RMCs**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5741 rev Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108894 Correction to NB-IoT TDD RMCs**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5742 rev Cat: A (Rel-17)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**HD-FDD RMC**

**R4-2108895 Correction to NB-IoT HD-FDD RMCs**

*Type: CR For: Agreement  
 36.101 v13.20.0 CR-5743 rev Cat: F (Rel-13)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108896 Correction to NB-IoT HD-FDD RMCs**

*Type: CR For: Agreement  
 36.101 v14.18.0 CR-5744 rev Cat: A (Rel-14)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108897 Correction to NB-IoT HD-FDD RMCs**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5745 rev Cat: A (Rel-15)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108898 Correction to NB-IoT HD-FDD RMCs**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5746 rev Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**R4-2108899 Correction to NB-IoT HD-FDD RMCs**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5747 rev Cat: A (Rel-17)  
  
 Source: Rohde & Schwarz*

**Decision:** The document was **not treated**.

**NB-IoT frequencies in standalone and guard-band operation**

**R4-2109005 NB-IOT frequencies in stand-alone and guard-band operation**

*Type: other For: Approval  
 Source: Sony*

**Decision:** The document was **not treated**.

**NB-IoT FCC emission requirements**

**R4-2110795 NB-IoT FCC emission requirements**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111022 CR to TS36.101: NB-IoT FCC emission requirements (Rel-14)**

*Type: CR For: Agreement  
 36.101 v14.18.0 CR-5788 rev Cat: F (Rel-14)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110995 CR to TS36.101: NB-IoT FCC emission requirements (Rel-15)**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5784 rev Cat: A (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110996 CR to TS36.101: NB-IoT FCC emission requirements (Rel-16)**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5785 rev Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110997 CR to TS36.101: NB-IoT FCC emission requirements (Rel-17)**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5786 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Introdcution of NS signalling for NB-IoT in USA**

**R4-2111483 CR for 36.101: Introduction of NS Signalling for NB-IoT in the USA**

*Type: CR For: Agreement  
 36.101 v14.18.0 CR-5796 rev Cat: F (Rel-14)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111484 Mirror CR for 36.101: Introduction of NS Signalling for NB-IoT in the USA**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5797 rev Cat: A (Rel-15)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111485 Mirror CR for 36.101: Introduction of NS Signalling for NB-IoT in the USA**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5798 rev Cat: A (Rel-16)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111486 Mirror CR for 36.101: Introduction of NS Signalling for NB-IoT in the USA**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5799 rev Cat: A (Rel-17)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

**SubPRB UE aspects**

**R4-2111199 CR of updating the subPRB UE aspect**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5789 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

in this CR, Remove the bracket of MPR tabel for subPRB allocation, adding the RMC for the subPRB testing for RAN5.

**Decision:** The document was **not treated**.

**R4-2111200 CR of updating the subPRB UE aspect**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5790 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

in this CR, Remove the bracket of MPR tabel for subPRB allocation, adding the RMC for the subPRB testing for RAN5.

**Decision:** The document was **not treated**.

**R4-2111201 CR of updating the subPRB UE aspect**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5791 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

in this CR, Remove the bracket of MPR tabel for subPRB allocation, adding the RMC for the subPRB testing for RAN5.

**Decision:** The document was **not treated**.

**R4-2111202 CR of updating the subPRB BS aspect**

*Type: CR For: Agreement  
 36.141 v15.12.0 CR-1314 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

in this CR, declaration of BS for subPRB support for LTE-M is added with related test specificaton updates.

**Decision:** The document was **not treated**.

**R4-2111203 CR of updating the subPRB BS aspect**

*Type: CR For: Agreement  
 36.141 v16.9.0 CR-1315 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

in this CR, declaration of BS for subPRB support for LTE-M is added with related test specificaton updates.

**Decision:** The document was **not treated**.

**R4-2111204 CR of updating the subPRB BS aspect**

*Type: CR For: Agreement  
 36.141 v17.1.0 CR-1316 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

in this CR, declaration of BS for subPRB support for LTE-M is added with related test specificaton updates.

**Decision:** The document was **not treated**.

**Topic#4: Other maintenance**

**Additional emission requirements for 2 bandUL CA/DC**

**R4-2109150 Clarification on additional emission requirements to 2 bandUL CA/DC (R15)**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5759 rev Cat: F (Rel-15)  
  
 Source: SoftBank Corp.*

**Abstract:**

Applicability of additional emission requirements for 2 band CA/DC is clarified. Discussion has been done in R15 NR Maint. Session for 101-1.

**Decision:** The document was **not treated**.

**R4-2109151 Clarification on additional emission requirements to 2 band UL CA/DC (R16)**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5760 rev Cat: A (Rel-16)  
  
 Source: SoftBank Corp.*

**Abstract:**

Mirror CR of R15

**Decision:** The document was **not treated**.

**R4-2109152 Clarification on additional emission requirements to 2 band UL CA/DC (R17)**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5761 rev Cat: A (Rel-17)  
  
 Source: SoftBank Corp.*

**Abstract:**

Mirror CR of R15/R16

**Decision:** The document was **not treated**.

#### 4.2.3 RRM requirements

#### 4.2.4 Demodulation and CSI requirements

## 5 Rel-16 maintenance

### 5.1 NR maintenance

#### 5.1.1 Enhancements on MIMO for NR

##### 5.1.1.1 RRM performance requirements (38.133)

###### 5.1.1.1.1 L1-SINR measurement accuracy

###### 5.1.1.1.2 Test cases

##### 5.1.1.2 Demodulation and CSI requirements (38.101-4)

###### 5.1.1.2.1 UE Demodulation requirements

###### 5.1.1.2.2 CSI requirements

##### 5.1.1.3 Others

#### 5.1.2 UE power saving in NR

##### 5.1.2.1 Demodulation and CSI requirements (38.101-4)

##### 5.1.2.2 Others

#### 5.1.3 NR RRM requirement enhancement

##### 5.1.3.1 RRM core requirements

##### 5.1.3.2 RRM performance requirements

###### 5.1.3.2.1 General

###### 5.1.3.2.2 Test cases

5.1.3.2.2.1 SRS carrier switching requirements

5.1.3.2.2.2 Multiple Scell activation/deactivation

5.1.3.2.2.3 CGI reading requirements with autonomous gap

5.1.3.2.2.4 BWP switching on multiple CCs

5.1.3.2.2.5 Inter-frequency measurement requirement without MG

5.1.3.2.2.6 Mandatory MG patterns

5.1.3.2.2.7 UE-specific CBW change

5.1.3.2.2.8 Spatial relation switch for uplink

5.1.3.2.2.9 Inter-band CA requirement for FR2 UE measurement capability of independent Rx beam

#### 5.1.4 Physical layer enhancements for NR URLLC

##### 5.1.4.1 Demodulation and CSI requirements

###### 5.1.4.1.1 UE demodulation requirements

###### 5.1.4.1.2 CSI requirements

###### 5.1.4.1.3 BS demodulation requirements

#### 5.1.5 Add support of NR DL 256QAM for FR2

##### 5.1.5.1 Demodulation and CSI requirements (38.101-4)

###### 5.1.5.1.1 UE demodulation requirements

###### 5.1.5.1.2 CSI requirements

###### 5.1.5.1.3 SDR

#### 5.1.6 NR performance requirement enhancements

##### 5.1.6.1 UE demodulation requirements

##### 5.1.6.2 CSI requirements

##### 5.1.6.3 BS demodulation requirements

#### 5.1.7 Other WIs

##### 5.1.7.1 BS RF requirements

##### 5.1.7.2 UE RF requirements

**Email discussion summary of [99-e][103] NR\_Maintenance\_R16, AI 5.1.7.2 – James Wang**

**R4-2107630 Email discussion summary for [99-e][103]** **NR\_Maintenance\_R16**

*Type: Other For: Information  
 Source: Moderator (Apple)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**Topic #1: Improper usage of band edge relaxation for MOP**

**R4-2109127 Correction of an improper usage of band edge relaxation for MOP**

*Type: other For: Approval  
 38.101-1 v CR- rev Cat: (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correction of an improper usage of band edge relaxation for MOP

**Decision:** The document was **not treated**.

**R4-2109129 Correction of an improper usage of band edge relaxation for MOP**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0759 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109130 Correction of an improper usage of band edge relaxation for MOP**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0760 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Rel17 CR corresponds to 0759 for Rel-16. The changes for Rel17 are made based on the same principle used in 0759, but the changes are not exactly the same so that the CR is submitted as Cat F CR in the same agenda.

**Decision:** The document was **not treated**.

**Topic #2: n40/n41 coexistence**

**R4-2109439 Discussion on n40/n41 coexistence**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110397 Discussion on spurious emission about UE co-existence between band n40 and n41**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**CR**

**R4-2108945 CR on spurious emission between n40 and n41 into Rel-16 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0749 rev Cat: F (Rel-16)  
  
 Source: CMCC,Huawei, HiSilicon, ZTE, OPPO,CATT*

**Decision:** The document was **not treated**.

**R4-2108946 CR on spurious emission between n40 and n41 into Rel-17 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0750 rev Cat: A (Rel-17)  
  
 Source: CMCC,Huawei, HiSilicon,ZTE, OPPO, CATT*

**Decision:** The document was **not treated**.

**Topic #3: Power limits for serving cells of UL CA**

**R4-2109959 LS to RAN2 on power limits for serving cells of UL CA**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Ericsson*

**Abstract:**

Draft LS to RAN2 to ask for specification of a RRC configured UE-specific power limits on a serving cell and a MAC-CE to enable/disable these limits per cell

**Decision:** The document was **not treated**.

**R4-2109957 Introduction of power limits for serving cells of UL CA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0797 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce power limits for serving cells of UL CA to prevent power reduction of serving cells for power limited UEs when the power reduction is enabled (FR2)

**Decision:** The document was **not treated**.

**R4-2109958 Introduction of power limits for serving cells of UL CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0798 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce power limits for serving cells of UL CA to prevent power reduction of serving cells for power limited UEs when the power reduction is enabled (FR2)

**Decision:** The document was **not treated**.

**R4-2109960 Introduction of power limits for serving cells of UL CA**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0373 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce power limits for serving cells of UL CA to prevent power reduction of serving cells for power limited UEs when the power reduction is enabled (FR2)

**Decision:** The document was **not treated**.

**R4-2109961 Introduction of power limits for serving cells of UL CA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0374 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce power limits for serving cells of UL CA to prevent power reduction of serving cells for power limited UEs when the power reduction is enabled (FR2)

**Decision:** The document was **not treated**.

**Topic #4: UL MIMO coherence with Tx switching**

**R4-2109584 LS on UL MIMO coherence for Tx switching between two carriers**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2109582 UL MIMO coherence for Tx switching between two carriers (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0782 rev Cat: F (Rel-16)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2109583 UL MIMO coherence for Tx switching between two carriers (Rel-17)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0783 rev Cat: A (Rel-17)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2108795 UL Switching and coherent UL MIMO**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0727 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2108796 UL Switching and coherent UL MIMO**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0728 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Topic #5: Tx switching for non-collocated UL CA**

**R4-2109977 TX switching for non-collocated UL CA**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose that the restriction on collocation for UL CA with TX switching is removed (no impact on RAN1 and RAN2).

**Decision:** The document was **not treated**.

**R4-2109978 Introduction of TX switching for non-collocated UL CA**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Draft TR to introduce time masks for non-collocated UL CA with TX switching

**Decision:** The document was **not treated**.

**Topic #6: Miscellaneous CRs for 38.101-1**

**Emission requirements for NS\_27**

**R4-2108853 Correction to additional spurious emissions requirements for NS\_27**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0732 rev Cat: F (Rel-16)  
  
 Source: Anritsu Limited*

**Decision:** The document was **not treated**.

**R4-2108854 Correction to additional spurious emissions requirements for NS\_27**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0733 rev Cat: A (Rel-17)  
  
 Source: Anritsu Limited*

**Decision:** The document was **not treated**.

**R4-2108918 CR Removal of square brackets from n48 NS\_27 R16 CAT F**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0737 rev Cat: F (Rel-16)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**R4-2108919 CR Removal of square brackets from n48 NS\_27 R17 CAT F**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0738 rev Cat: F (Rel-17)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**TDD Intraband CA REFSENS requirement**

**R4-2108920 CR TDD Intraband CA REFSENS requirement issue R16**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0739 rev Cat: F (Rel-16)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**R4-2108921 CR TDD Intraband CA REFSENS requirement issue R17**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0740 rev Cat: A (Rel-17)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**Supported channel bandwidth for CA\_n39-n41-n79**

**R4-2109185 Correction on supported channel bandwidth for CA\_n39-n41-n79**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0767 rev Cat: F (Rel-16)  
  
 Source: CATT, CMCC*

**Decision:** The document was **not treated**.

**R4-2109126 Correction on supported channel bandwidth for CA\_n39-n41-n79**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0757 rev Cat: A (Rel-17)  
  
 Source: CATT, CMCC*

**Decision:** The document was **not treated**.

**Correction of Rel-16 NR inter-band CA DC configuration for 2DL with up to 2 bands UL**

**R4-2109378 CR for correction of Rel-16 NR inter-band CA DC configuration for 2DL with up to 2 bands UL**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0774 rev Cat: F (Rel-16)  
  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108728 CR for correction of Rel-17 NR inter-band CA DC configuration for 2DL with up to 2 bands UL**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0871 rev Cat: A (Rel-17)  
  
 Source: Verizon Denmark*

**Abstract:**

Mirror CR CAT-A

**Decision:** The document was **not treated**.

**Cleanup for UE co-existence 38.101-1 Rel-16**

**R4-2109454 Cleanup for UE co-existence 38.101-1 Rel-16**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0778 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109458 Cleanup for UE co-existence 38.101-1 Rel-17**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0779 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**Correct BCS for CA\_n7-n25**

**R4-2109779 CR to TS 38.101-1 to correct BCS for CA\_n7-n25**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0789 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

50 MHz is added to n7 for consistency with higher order CA

**Decision:** The document was **not treated**.

**R4-2109780 CR to TS 38.101-1 to correct BCS for CA\_n7-n25**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0790 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

50 MHz is added to n7 for consistency with higher order CA

**Decision:** The document was **not treated**.

**Mandatory simultaneous Rx/Tx capability for FR1 NR-CA combinations**

**R4-2109839 CR for updating the note of mandatory simultaneous Rx/Tx capability for FR1 NR-CA combinations**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0791 rev Cat: F (Rel-16)  
  
 Source: CHTTL, NTT DOCOMO, INC., SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109840 CR for updating the note of mandatory simultaneous Rx/Tx capability for FR1 NR-CA combinations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0792 rev Cat: A (Rel-17)  
  
 Source: CHTTL, NTT DOCOMO, INC., SoftBank Corp.*

**Decision:** The document was **not treated**.

**Correct the configurations for intra-band CA**

**R4-2109878 CR for 38.101-1 to correct the configurations for intra-band CA (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0793 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Correction to MPR for serving cells of intra-band UL CA**

**R4-2109962 Correction to MPR for serving cells of intra-band UL CA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0799 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the MPR per serving cells for UL CA (related to PH reporting)

**Decision:** The document was **not treated**.

**R4-2109963 Correction to MPR for serving cells of intra-band UL CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0800 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the MPR per serving cells for UL CA (related to PH reporting)

**Decision:** The document was **not treated**.

**Corrections on power tolerance for intra-band contiguous CA**

**R4-2110195 CR for 38.101-1 Rel16 corrections on power tolerance for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0815 rev Cat: F (Rel-16)  
  
 Source: Xiaomi, Apple*

**Decision:** The document was **not treated**.

**R4-2110196 CR for 38.101-1 Rel17 corrections on power tolerance for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0816 rev Cat: A (Rel-17)  
  
 Source: Xiaomi, Apple*

**Decision:** The document was **not treated**.

**Correction on configured transmitted power for NR non-contiguous CA**

**R4-2110439 CR to TS38.101-1: Correction on configured transmitted power for NR non-contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0822 rev Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110440 CR to TS38.101-1: Correction on configured transmitted power for NR non-contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0823 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**Add missing CA**

**R4-2110441 CR to TS38.101-1: Add missing CA\_n1A-n3A-n78A**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0824 rev Cat: F (Rel-16)  
  
 Source: ZTE Corporation, China Telecom*

**Decision:** The document was **not treated**.

**R4-2110442 CR to TS38.101-1: Add missing CA\_n1A-n3A-n78A**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0825 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation, China Telecom*

**Decision:** The document was **not treated**.

**Correction to Band n48 reference sensitivity**

**R4-2110990 Correction to Band n48 reference sensitivity**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0837 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110991 Correction to Band n48 reference sensitivity**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0838 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111084 Rel-16 CR 38101-1-g70 corrections**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0846 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR 38101-1-g70 corrections

**Decision:** The document was **not treated**.

**Intra-band UL CA Pcmax\_r16**

**R4-2111362 CR on intra-band UL CA Pcmax\_r16**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0853 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111363 CR on intra-band UL CA Pcmax\_r17**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0854 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Corrections to intra-band non-contiguous CA REFSENS**

**R4-2111519 CR for 38.101-1-g70: Corrections to intra-band non-contiguous CA REFSENS**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0867 rev Cat: F (Rel-16)  
  
 Source: Skyworks Solutions Inc.,T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111520 CR for 38.101-1-h10: Corrections to intra-band non-contiguous CA REFSENS**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0868 rev Cat: A (Rel-17)  
  
 Source: Skyworks Solutions Inc.,T-Mobile USA*

**Decision:** The document was **not treated**.

**Corrections to NS\_12, NS\_13, NS\_14, NS\_15**

**R4-2111526 CR for 38.101-1-g70: Corrections to NS\_12, NS\_13, NS\_14, NS\_15**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0869 rev Cat: F (Rel-16)  
  
 Source: Skyworks Solutions Inc.,Dish,T-Mobile,Nokia,Qualcomm Inc.*

**Decision:** The document was **not treated**.

**R4-2111527 CR for 38.101-1-h10: Corrections to NS\_12, NS\_13, NS\_14, NS\_15**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0870 rev Cat: A (Rel-17)  
  
 Source: Skyworks Solutions Inc.,Dish,T-Mobile,Nokia,Qualcomm Inc.*

**Decision:** The document was **not treated**.

**Correct some errors in Delta TIB and Delta RIB table**

R4-2110186/187 are moved from AI 4.1.2.1 to AI 5.1.7.2

**R4-2110186 CR for Rel-16 38.101-1 to correct some errors in Delta TIB and Delta RIB table**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0813 rev Cat: F (Rel-16)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110187 CR for Rel-17 38.101-1 to correct some errors in Delta TIB and Delta RIB table**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0814 rev Cat: F (Rel-17)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**Topic #7: Miscellaneous CRs for 38.101-2**

**CA\_n260**

**R4-2108922 Removal of CA\_n260(\*) notation and IE fix R16 CATF**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0363 rev Cat: F (Rel-16)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**R4-2108923 Removal of CA\_n260(\*) notation and IE fix R17 CATA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0364 rev Cat: A (Rel-17)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**Raster for n259**

**R4-2109027 Correction of the channel raster of n259 for TS 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0365 rev Cat: F (Rel-16)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109028 Correction of the channel raster of n259 for TS 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0366 rev Cat: A (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**inter-band DL CA CBM and Beam Management Reference Signal location for FR2 CA**

**R4-2109447 CR to 38.101-2 on the definition for inter-band DL CA CBM and Beam Management Reference Signal location for FR2 CA**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0368 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109448 CR to 38.101-2 on the definition for inter-band DL CA CBM and Beam Management Reference Signal location for FR2 CA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0369 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**Modified MPR behaviour**

**R4-2109966 Correction to modified MPR behaviour**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0375 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct modified MPR behaviour (bits shall be set if the bit is introduced in an earlier release)

**Decision:** The document was **not treated**.

**R4-2109967 Correction to modified MPR behaviour**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0376 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to correct modified MPR behaviour (bits shall be set if the bit is introduced in an earlier release)

**Decision:** The document was **not treated**.

**Side conditions for beam correspondence based on SSB and CSI-RS for n259 (Rel-16)**

**R4-2110180 CR to 38.101-2 on side conditions for beam correspondence based on SSB and CSI-RS for n259 (Rel-16)**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0383 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110152 CR to 38.101-2 on side conditions for beam correspondence based on SSB and CSI-RS for n259 (Rel-17)**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0378 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**CA\_n260-n261**

**R4-2110443 CR to TS38.101-2: Some Corrections on for CA\_n260-n261**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0386 rev Cat: F (Rel-16)  
  
 Source: ZTE Corporation, Verizon*

**Decision:** The document was **not treated**.

**R4-2110444 CR to TS38.101-2: Some Corrections on for CA\_n260-n261**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0387 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation, Verizon*

**Decision:** The document was **not treated**.

**CA\_n261**

**R4-2111085 Rel-16 CR 38101-2-g70 corrections**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0390 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR 38101-2-g70 corrections

**Decision:** The document was **not treated**.

**FR2 inter-band DL CA CBM and IBM**

**R4-2111361 CR on FR2 inter-band DL CA CBM and IBM\_R17 CatA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0396 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Removing ambiguity on MPRnarrow for PC3 MPR**

**R4-2111524 CR for 38.101-2-g70: Removing ambiguity on MPRnarrow for PC3 MPR**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0407 rev Cat: F (Rel-16)  
  
 Source: Skyworks Solutions Inc.,Qualcomm Inc.*

**Decision:** The document was **not treated**.

**R4-2111525 CR for 38.101-2-h10: Removing ambiguity on MPRnarrow for PC3 MPR**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0408 rev Cat: A (Rel-17)  
  
 Source: Skyworks Solutions Inc.,Qualcomm Inc.*

**Decision:** The document was **not treated**.

**Correct the subblock divisions for CA\_n260 and CA\_n261**

R4-2110188/189 are moved from AI 4.1.2.2 to AI 5.1.7.2

**R4-2110188 CR for Rel-16 38.101-2 to correct some errors in Table 5.5A.2-2**

*Type: CR For: Agreement  
 38.101-2 v16.7.0 CR-0384 rev Cat: F (Rel-16)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110189 CR Rel-17 38.101-2 to correct some errors in Table 5.5A.2-2**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0385 rev Cat: F (Rel-17)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**Topic #7: Miscellaneous CRs for 38.101-3**

**Add the missing combos**

**R4-2109369 CR for correction of Rel-16 Dual Connectivity of 1LTE band (1DL/1UL) and 1NR band (1DL/1UL) with FR1**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0533 rev Cat: F (Rel-16)  
  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108727 CR for correction of Rel-17 Dual Connectivity of 1LTE band (1DL/1UL) and 1NR band (1DL/1UL) with FR1**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0606 rev Cat: A (Rel-17)  
  
 Source: Verizon Denmark*

**Abstract:**

Mirror CR CAT-A

**Decision:** The document was **not treated**.

**DC\_39A\_nxxA**

**R4-2108855 Correction of note for DC\_39A\_nxxA**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0515 rev Cat: F (Rel-16)  
  
 Source: Anritsu Limited*

**Decision:** The document was **not treated**.

**R4-2108856 Correction of note for DC\_39A\_nxxA**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0516 rev Cat: A (Rel-17)  
  
 Source: Anritsu Limited*

**Decision:** The document was **not treated**.

**DC\_7A-20A\_n3A**

**R4-2108924 CR correction to DC\_7A-20A\_n3A MSD test point R16 CATF**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0520 rev Cat: F (Rel-16)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**R4-2108925 CR correction to DC\_7A-20A\_n3A MSD test point R17 CATA**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0521 rev Cat: A (Rel-17)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**UE co-existence**

**R4-2109456 Cleanup for UE co-existence 38.101-3 Rel-16**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0535 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109459 Cleanup for UE co-existence 38.101-3 Rel-17**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0536 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**Delta TIB and RIB correction**

**R4-2109533 CR to TS 38.101-3 on delta TIB and RIB correction (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0537 rev Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

In this paper, delta TIB and RIB values for some configurations are corrected.

**Decision:** The document was **not treated**.

**R4-2109534 CR to TS 38.101-3 on delta TIB and RIB corrections (Rel-17)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0538 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

**Abstract:**

In this paper, delta TIB and RIB values for some configurations are corrected.

**Decision:** The document was **not treated**.

**Simultaneous Rx/Tx capability**

**R4-2109856 CR for updating the note of mandatory simultaneous Rx/Tx capability for FR1 EN-DC combinations**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0550 rev Cat: F (Rel-16)  
  
 Source: CHTTL, NTT DOCOMO, INC. , SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109913 CR for updating the note of mandatory simultaneous Rx/Tx capability for FR1 EN-DC combinations**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0552 rev Cat: A (Rel-17)  
  
 Source: CHTTL, NTT DOCOMO, INC. , SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109917 CR for updating the note of mandatory simultaneous Rx/Tx capability for FR2 included and FR1+FR2 EN-DC and NR-CA combinations**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0553 rev Cat: F (Rel-16)  
  
 Source: CHTTL, NTT DOCOMO, INC. , SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109920 CR for updating the note of mandatory simultaneous Rx/Tx capability for FR2 included and FR1+FR2 EN-DC and NR-CA combinations**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0554 rev Cat: A (Rel-17)  
  
 Source: CHTTL, NTT DOCOMO, INC. , SoftBank Corp.*

**Decision:** The document was **not treated**.

**Missing delta T & delta R of EN-DC with intra-band non-contiguous LTE CA combos**

**R4-2110479 CR for missing delta T & delta R of EN-DC with intra-band non-contiguous LTE CA combos in Rel.16**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0578 rev Cat: F (Rel-16)  
  
 Source: CHTTL, SGS Wireless*

**Decision:** The document was **not treated**.

**R4-2110577 CR for missing delta T & delta R of EN-DC with intra-band non-contiguous LTE CA combos in Rel.16**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0580 rev Cat: A (Rel-17)  
  
 Source: CHTTL, SGS Wireless*

**Decision:** The document was **not treated**.

**Ambiguity of UE capability maxUplinkDutyCycle**

**R4-2110988 Notational amendment and correction to PCMAX for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0587 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110989 Notational amendment and correction to PCMAX for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0588 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Changing DC\_XA\_(n)YAA into DC\_XA-(n)YAA**

**R4-2111086 Rel-16 CR 38101-3-g70 corrections**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0591 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR 38101-3-g70 corrections

**Decision:** The document was **not treated**.

**Intra-band non-contiguous EN-DC REFSENS**

**R4-2111522 CR for 38.101-3-g70: Corrections to intra-band non-contiguous EN-DC REFSENS**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0604 rev Cat: F (Rel-16)  
  
 Source: Skyworks Solutions Inc.,T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111523 CR for 38.101-3-h10: Corrections to intra-band non-contiguous EN-DC REFSENS**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0605 rev Cat: A (Rel-17)  
  
 Source: Skyworks Solutions Inc.,T-Mobile USA*

**Decision:** The document was **not treated**.

**Delta TIB and Delta RIB**

R4-2110190/191 are moved from AI 4.1.2.3 to AI 5.1.7.2

**R4-2110190 CR for Rel-16 38.101-3 to correct some errors in Delta TIB and Delta RIB table**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0568 rev Cat: F (Rel-16)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110191 CR for Rel-17 38.101-3 to correct some errors in Delta TIB and Delta RIB table**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0569 rev Cat: F (Rel-17)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**Withdrawn documents**

**R4-2110498 CR for missing delta T & delta R of EN-DC with intra-band non-contiguous LTE CA combos in Rel.16**

*Type: CR For: Approval  
 38.101-3 v16.7.0 CR-0579 rev Cat: A (Rel-16)  
  
 Source: CHTTL*

**Decision:** The document was **withdrawn**.

**R4-2109125 Correction on supported channel bandwidth for CA\_n39-n41-n79**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0756 rev Cat: F (Rel-17)  
  
 Source: CATT, CMCC*

**Decision:** The document was **withdrawn**.

##### 5.1.7.3 RRM requirements

###### 5.1.7.3.1 RRM core

###### 5.1.7.3.2 RRM performance

##### 5.1.7.4 Demodulation and CSI requirements

###### 5.1.7.4.1 UE demodulation requirements

###### 5.1.7.4.2 CSI requirements

###### 5.1.7.4.3 BS demodulation requirements

##### 5.1.7.5 NR MIMO OTA test methods (38.827)

### 5.2 LTE maintenance

#### 5.2.1 Even further mobility enhancement

##### 5.2.1.1 RRM core requirements

##### 5.2.1.2 RRM performance requirements

#### 5.2.2 Other WIs

##### 5.2.2.1 BS RF requirements

##### 5.2.2.2 UE RF requirements

**Refer to Email discussion summary of [99-e][104] LTE\_Maintenance – Laurent Noel**

**Topic #1: Band specific aspects**

**CA correction**

**R4-2108916 CR LTE CA corrections R16 CAT F**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5748 rev Cat: F (Rel-16)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**R4-2108917 CR LTE CA corrections R17 CAT F**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5749 rev Cat: F (Rel-17)  
  
 Source: Nokia*

**Decision:** The document was **not treated**.

**MSD for dual uplink LTE-A CA**

**R4-2109838 CR on MSD test configurations for dual uplink LTE-A CA**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5777 rev Cat: F (Rel-16)  
  
 Source: LG Electronics France*

**Abstract:**

Correction CR to fix some typo in MSD test configuration in TS36.101 in Rel-16. the correction are already reflected in TS36.101 in Rel-17 at last RAN4 #98 meeting.

**Decision:** The document was **not treated**.

**MPR/AMPR for LTE CA 256QAM PC2**

**R4-2111294 MPR and AMPR for LTE CA 256QAM PC2**

*Type: discussion For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111293 CR MPR and AMPR for LTE CA 256QAM PC2**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5792 rev Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111421 n41 CA\_NS\_04 AMPR for 256QAM**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Topic#4: Other maintenance**

**EVM requirements**

**R4-2111357 CR on EVM requirement for TS 36.101-1**

*Type: CR For: Agreement  
 36.101 v8.29.0 CR-5793 rev Cat: F (Rel-8)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**LTE REFSENS exceptions simplification**

**R4-2109739 LS to RAN5 on LTE REFSENS Exceptions Simplification**

*Type: LS out For: Approval  
 to RAN5  
 Source: Nokia*

**Decision:** The document was **not treated**.

**R4-2110817 LTE Rel-17 REFSENS Exception Simplification**

*Type: discussion For: Approval  
 36.101 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc., Nokia*

**Abstract:**

This paper reviews the impact of WF [R4-2016940] agreement on TS 36.101 REL17 changes. There are few benefits to introduce the intended WF BigCR. We propose to send an LS to RAN5 at this meeting to seek feedback on two options to pursue the simplification

**Decision:** The document was **not treated**.

##### 5.2.2.3 RRM requirements

###### 5.2.2.3.1 RRM core requirements

###### 5.2.2.3.2 RRM performance requirements

##### 5.2.2.4 Demodulation and CSI requirements

###### 5.2.2.4.1 UE demodulation requirements

###### 5.2.2.4.2 CSI requirements

###### 5.2.2.4.3 BS demodulation requirements

### 5.3 Rel-16 UE feature list maintenance

## 6 Rel-16 non-spectrum related work items for NR

### 6.1 NR-based access to unlicensed spectrum

#### 6.1.1 System parameter maintenance

**Email discussion summary of [99-e][107] NR\_unlic\_Maintenance, AI 6.1.1 & AI 6.1.2 – Gene Fong**

**R4-2107633 Email discussion summary for [99-e][107]** **NR\_unlic\_Maintenance**

*Type: Other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**Topic#1: Wideband operation**

R4-2109428 is moved from AI 6.1.2 to AI 6.1.1

**R4-2109428 NR-U wideband operation and intra-carrier guard bands**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110814 NR-U - System parameters**

*Type: discussion For: Approval  
 Source: Nokia*

**Decision:** The document was **not treated**.

**CR**

**R4-2111012 Corrections of NR-U wideband operation intra-carrier guard bands**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0840 rev Cat: F (Rel-16)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2111013 Corrections of NR-U wideband operation intra-carrier guard bands**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0841 rev Cat: A (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109972 Applicability of minimum requirements for shared spectrum access**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0803 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to add the applicability of minimum requirements for DL (Mode 1) and UL

**Decision:** The document was **not treated**.

**R4-2109973 Applicability of minimum requirements for shared spectrum access**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0804 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to add the applicability of minimum requirements for DL (Mode 1) and UL

**Decision:** The document was **not treated**.

**Topic#2: Other corrections**

**BCS**

**R4-2109970 Corrections to BCS for n46**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0801 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the BCS for n46: remove impossible configurations and add a new set for n\*20 MHz aggregation.

**Decision:** The document was **not treated**.

**R4-2109971 Corrections to BCS for n46**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0802 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the BCS for n46: remove impossible configurations and add a new set for n\*20 MHz aggregation.

**Decision:** The document was **not treated**.

**R4-2110810 NR-U - System parameters**

*Type: discussion For: Approval  
 Source: Nokia*

**Decision:** The document was **withdrawn**.

#### 6.1.2 UE RF requirement maintenance

**Topic#2: Other corrections**

**Correction of 60 and 80MHz channels**

**R4-2110128 Discussion on correction of NR-U band n46 channels for 60 MHz and 80 MHz**

*Type: other For: Approval  
 Source: Nokia, Charter Communications, CableLabs*

**Decision:** The document was **not treated**.

**R4-2110129 CR to 38.104 with correction of NR-U 60 MHz and 80 MHz channels**

*Type: CR For: Agreement  
 38.104 v16.7.0 CR-0322 rev Cat: F (Rel-16)  
  
 Source: Nokia, Charter Communications, CableLabs*

**Decision:** The document was **not treated**.

**R4-2110130 CR to 38.104 with correction of NR-U 60 MHz and 80 MHz channels**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0323 rev Cat: A (Rel-17)  
  
 Source: Nokia, Charter Communications, CableLabs*

**Decision:** The document was **not treated**.

**R4-2110131 CR to 38.101-1 with correction of NR-U 60 MHz and 80 MHz channels**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0810 rev Cat: F (Rel-16)  
  
 Source: Nokia, Charter Communications, CableLabs*

**Decision:** The document was **not treated**.

**R4-2110132 CR to 38.101-1 with correction of NR-U 60 MHz and 80 MHz channels**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0811 rev Cat: A (Rel-17)  
  
 Source: Nokia, Charter Communications, CableLabs*

**Decision:** The document was **not treated**.

**Other maintenances**

**R4-2110986 Applicability of requirements for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0835 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110987 Applicability of requirements for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0836 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

#### 6.1.3 BS RF requirement maintenance

#### 6.1.4 BS conformance testing

##### 6.1.4.1 General

##### 6.1.4.2 Transmitter characteristics

##### 6.1.4.3 Receiver characteristics

#### 6.1.5 RRM core requirements maintenance (38.133)

##### 6.1.5.1 General

##### 6.1.5.2 RRC connection mobility control

##### 6.1.5.3 SCell activation/deactivation (delay and interruption)

##### 6.1.5.4 Active TCI state switching

##### 6.1.5.5 RLM

##### 6.1.5.6 Beam management

##### 6.1.5.7 Measurement requirements

##### 6.1.5.8 Measurement capability and reporting criteria

##### 6.1.5.9 Timing

##### 6.1.5.10 Other requirements

#### 6.1.6 RRM performance requirements (38.133)

##### 6.1.6.1 General

##### 6.1.6.2 Measurement accuracy requirements

##### 6.1.6.3 Test cases

###### 6.1.6.3.1 General

###### 6.1.6.3.2 RRC IDLE cell re-selection

###### 6.1.6.3.3 HO (delay and interruptions)

###### 6.1.6.3.4 RRC Re-establishment

###### 6.1.6.3.5 RRC Connection Release with Redirection

###### 6.1.6.3.6 Random access

###### 6.1.6.3.7 Timing (transmit timing and TA)

###### 6.1.6.3.8 BWP switching delay and interruptions

###### 6.1.6.3.9 PSCell addition/release (delay and interruption)

###### 6.1.6.3.10 SCell activation/deactivation (delay and interruption)

###### 6.1.6.3.11 Other interruptions

###### 6.1.6.3.12 RLM

###### 6.1.6.3.13 Beam management (BFD and link recovery)

###### 6.1.6.3.14 SS-RSRP/SS-RSRQ/SS-SINR/L1-RSRP measurement procedure (intra-frequency, inter-frequency, inter-RAT)

###### 6.1.6.3.15 RSSI/CO measurement procedure (intra-frequency, inter-frequency, inter-RAT)

###### 6.1.6.3.16 SFTD measurement procedure

###### 6.1.6.3.17 SS-RSRP/SS-RSRQ/SS-SINR/L1-RSRP measurement accuracy (intra-frequency, inter-frequency, inter-RAT)

###### 6.1.6.3.18 RSSI/CO measurement accuracy (intra-frequency, inter-frequency, inter-RAT)

###### 6.1.6.3.19 SFTD measurement accuracy

###### 6.1.6.3.20 Other

#### 6.1.7 Demodulation and CSI requirements (38.101-4/38.104)

##### 6.1.7.1 General

##### 6.1.7.2 UE demodulation requirements

##### 6.1.7.3 CSI requirements

##### 6.1.7.4 BS demodulation requirements

###### 6.1.7.4.1 General

###### 6.1.7.4.2 PUSCH requirements

###### 6.1.7.4.3 PUCCH requirements

###### 6.1.7.4.4 PRACH requirements

### 6.2 5G V2X with NR sidelink

#### 6.2.1 RF core requirements maintenance

**Email discussion summary of [99-e][108] 5G\_V2X\_NRSL\_UE\_RF, AI 6.2.1 – Suhwan Lim**

**R4-2107634 Email discussion summary for [99-e][108] 5G\_V2X\_NRSL\_UE\_RF**

*Type: Other For: Information  
 Source: Moderator (LGE)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**Topic #1: Maintenance of V2X UE RF requirements**

**Topic #1-1 switching requirements**

**R4-2109044 Discussion on time mask for NR V2X and LTE V2X switching in ITS band**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109688 Discussion on the switching period position between LTE SL and NR SL**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109919 Switching position for TDM operation between LTE V2X and NR V2X in ITS spectrum**

*Type: other For: Approval  
 Source: LG Electronics France*

**Abstract:**

discuss the switching position for TDM operation in ITS spectrum

**Decision:** The document was **not treated**.

**R4-2110027 on switching period**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2111437 On SL switching period**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

CR

**R4-2109045 CR for TS 38.101-3, Time mask for NR V2X and LTE V2X switching in ITS band**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0525 rev Cat: F (Rel-16)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109689 CR for TS 38.101-3 Switching period position for NR V2X (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0542 rev Cat: F (Rel-16)  
  
 Source: vivo*

**Abstract:**

Add Sub-clause 6.3E Output power dynamics for V2X operation to TS 38.101-3.

**Decision:** The document was **not treated**.

**R4-2109690 CR for TS 38.101-3 Switching period position for NR V2X (Rel-17)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0543 rev Cat: A (Rel-17)  
  
 Source: vivo*

**Abstract:**

Add Sub-clause 6.3E Output power dynamics for V2X operation to TS 38.101-3.

**Decision:** The document was **not treated**.

**R4-2109922 CR for TS 38.101-3, Time mask for NR V2X and LTE V2X switching in ITS band**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0555 rev Cat: A (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2110020 CR for TS 38.101-3 switching period for V2X con-current operation**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0561 rev Cat: F (Rel-16)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110021 CR for TS 38.101-3 switching period for V2X con-current operation**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0562 rev Cat: A (Rel-17)  
  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2111438 CR for TS 38.101-3: NR V2X SL switching period (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0601 rev Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111439 CR for TS 38.101-3: NR V2X SL switching period (Rel-17)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0602 rev Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**Topic #1-2 A-MPR requirements**

**R4-2110400 Discussion on Rel-16 NR V2X AMPR value for both NS\_33 and NS\_52**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110427 CR for 38.101-1 to correct AMPR value for NR V2X NS\_52(Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0820 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110428 CR for 38.101-1 to correct AMPR value for NR V2X NS\_52(Rel-17)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0821 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 6.2.2 RRM core requirements maintenance (38.133)

#### 6.2.3 RRM performance requirements maintenance (38.133)

#### 6.2.4 Demodulation requirements (38.101-4)

##### 6.2.4.1 General

##### 6.2.4.2 Single link test

###### 6.2.4.2.1 PSSCH demodulation test

###### 6.2.4.2.2 PSCCH demodulation test

###### 6.2.4.2.3 PSBCH demodulation test

###### 6.2.4.2.4 PSFCH demodulation test

##### 6.2.4.3 Multiple link test

###### 6.2.4.3.1 Power imbalance requirement

###### 6.2.4.3.2 HARQ soft buffer combing test

###### 6.2.4.3.3 PSFCH decoding capability test

###### 6.2.4.3.4 PSCCH/PSSCH decoding capability

### 6.3 Integrated Access and Backhaul for NR

#### 6.3.1 RF requirements maintenance

##### 6.3.1.1 Transmitter requirements

##### 6.3.1.2 Receiver requirements

#### 6.3.2 RF conformance testing

##### 6.3.2.1 General and work plan

##### 6.3.2.2 Common test issues for conducted and radiated conformance testing

###### 6.3.2.2.1 Test configurations

###### 6.3.2.2.2 Test models

###### 6.3.2.2.3 Others

##### 6.3.2.3 Conducted conformance testing

###### 6.3.2.3.1 Transmitter characteristics

###### 6.3.2.3.2 Receiver characteristics

###### 6.3.2.3.3 Other test issues

##### 6.3.2.4 Radiated conformance testing

###### 6.3.2.4.1 Transmitter characteristics

###### 6.3.2.4.2 Receiver characteristics

###### 6.3.2.4.3 Other test issues

#### 6.3.3 RRM core requirement maintenance

#### 6.3.4 RRM performance requirements

##### 6.3.4.1 General

##### 6.3.4.2 Test cases

###### 6.3.4.2.1 RRC Re-establishment

###### 6.3.4.2.2 RRC Connection Release with Redirection

###### 6.3.4.2.3 IAB-MT transmit timing

###### 6.3.4.2.4 RLM

###### 6.3.4.2.5 Beam Failure Detection and Link Recovery

#### 6.3.5 EMC performance requirements

#### 6.3.6 Demodulation and CSI requirements

##### 6.3.6.1 General

##### 6.3.6.2 IAB-DU performance requirements

##### 6.3.6.3 IAB-MT performance requirements

### 6.4 Multi-RAT Dual-Connectivity and Carrier Aggregation enhancements

**Email discussion summary of [99-e][106] LTE\_NR\_DC\_CA\_enh\_RF\_Maintanence –Christian Bergljung**

**R4-2107632 Email discussion summary for [99-e][106]** **LTE\_NR\_DC\_CA\_enh\_RF\_Maintanence**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**Paper under discussions**

**R4-2111166 Reply LS on Further Reply LS on power control for NR-DC**

*Type: LS out For: Approval  
 to RAN1, cc RAN2  
 Source: Ericsson*

**Abstract:**

Discussion and LS reply on Further Reply LS on power control for NR-DC

**Decision:** The document was **not treated**.

**Refer contributions in AI 13.1**

R4-2108801 On Further Reply LS on power control for NR-DC Qualcomm

R4-2111354 discussion for Reply LS on power control for NR-DC Huawei

R4-2109682 Discussion and Reply on Further Reply LS on power control for NR-DC Vivo

#### 6.4.1 RRM core requirement maintenance (38.133/36.133)

##### 6.4.1.1 Early Measurement reporting

##### 6.4.1.2 Efficient and low latency serving cell configuration, activation and setup

#### 6.4.2 RRM performance requirements (38.133)

##### 6.4.2.1 Early Measurement reporting

###### 6.4.2.1.1 General

###### 6.4.2.1.2 Measurement accuracy requirements

###### 6.4.2.1.3 Test cases

##### 6.4.2.2 Efficient and low latency serving cell configuration, activation and setup

###### 6.4.2.2.1 General

###### 6.4.2.2.2 Test cases for direct SCell activation

###### 6.4.2.2.3 Test case for SCell Dormancy

### 6.5 NR Positioning Support

#### 6.5.1 RRM core requirement maintenance (38.133)

##### 6.5.1.1 PRS-RSTD measurement requirements

##### 6.5.1.2 PRS-RSRP measurement requirements

##### 6.5.1.3 UE Rx-Tx time difference measurement requirements

##### 6.5.1.4 Other requirements

#### 6.5.2 RRM performance requirements (38.133)

##### 6.5.2.1 General

##### 6.5.2.2 UE requirements and test cases

###### 6.5.2.2.1 General

###### 6.5.2.2.2 Measurement accuracy requirements

6.5.2.2.2.1 PRS RSTD

6.5.2.2.2.2 PRS RSRP

6.5.2.2.2.3 UE Rx-Tx time difference

###### 6.5.2.2.3 Test cases

6.5.2.2.3.1 General

6.5.2.2.3.2 Measurement requirements

###### 6.5.2.2.4 Other

##### 6.5.2.3 gNB requirements

###### 6.5.2.3.1 General

###### 6.5.2.3.2 SRS-RSRP requirements

###### 6.5.2.3.3 gNB Rx-Tx time difference requirements

### 6.6 NR RRM requirements for CSI-RS based L3 measurement

#### 6.6.1 RRM core requirements maintenance (38.133)

#### 6.6.2 RRM performance requirements (38.133)

##### 6.6.2.1 General

##### 6.6.2.2 Measurement accuracy requirements

###### 6.6.2.2.1 CSI-RSRP requirements

###### 6.6.2.2.2 CSI-RSRQ requirements

###### 6.6.2.2.3 CSI-SINR requirements

##### 6.6.2.3 Test cases

###### 6.6.2.3.1 General

###### 6.6.2.3.2 Intra-frequency measurement

###### 6.6.2.3.3 Inter-frequency measurement

###### 6.6.2.3.4 Measurement performance

### 6.7 R16 TEI

#### 6.7.1 Transmit diversity and power class related to UL MIMO

**Email discussion summary of [99-e][109] NR\_TxD, AI 6.7.1 – Sanjun Feng**

**R4-2107635 Email discussion summary for [99-e][109]** **NR\_TxD**

*Type: Other For: Information  
 Source: Moderator (Vivo)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

##### 6.7.1.1 R16 support of transmit diversity

**Remaining issues**

**R4-2108793 SRS switching and spectral flatness with TX diversity**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2108909 Relation between TxD and ul-FullPwrModes & TxD and SRS antenna switching**

*Type: other For: Approval  
 38.101-1 v CR- rev Cat: (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109420 On remaining issues on NR TxD**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109678 Remaining issues in Transparent Tx Diversity**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**EVM**

**R4-2111495 On Defining EVM for Transmit Diversity using the Pseudo-Inverse**

*Type: discussion For: Approval  
 Source: Lenovo, Motorola Mobility*

**Decision:** The document was **not treated**.

**LS**

**R4-2109974 More on transparent TxD and a Draft Reply LS to RAN2**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we discuss whether the TxD capability is needed and propose that the relation of the TxD capability is made clear at a minimum. A Draft Reply LS to RAN2 is attached.

**Decision:** The document was **not treated**.

**R4-2110815 R16 TxD testing issues and draft LS to RAN5**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**CR**

**R4-2111440 CR for TS 38.101-1 Tx diversity requirements**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0865 rev Cat: B (Rel-16)  
  
 Source: Huawei,HiSilicon, vivo, OPPO*

**Decision:** The document was **not treated**.

**R4-2111502 CR for TS 38.101-1 Tx diversity requirements**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0866 rev Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon, vivo, OPPO*

**Decision:** The document was **not treated**.

##### 6.7.1.2 Power class related to UL MIMO and other related req. (MPR, SEM, etc)

**Power class**

**R4-2108859 Handling power class ambiguity**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109679 Remaining issues in Power class & UL MIMO related requirments**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**MPR**

R4-2108794 and R4-2109703 are moved from AI 6.7.1.1 to AI 6.7.1.2

**R4-2108794 MPR for 2Tx devices**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109703 MPR of transmit diversity for power class2**

*Type: discussion For: Discussion  
 Source: LG Electronics Polska*

**Abstract:**

It discusses MPR for transmit diversity for power class 2 with 2PA.

**Decision:** The document was **not treated**.

**R4-2111011 MPR evaluation for PC2 transparent Tx diversity**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-16)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we do not provide MPR data as the time was too short between the two meetings to perform these types of cumbersome measurements, but nevertheless we have performed some experiments to provide further insights on the effect of reverse

**Decision:** The document was **not treated**.

**LS**

**R4-2111441 Discussion and draft reply LS on EN-DC power class**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**CR**

**R4-2111442 CR for TS 38.101-3 correction of power class for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0603 rev Cat: F (Rel-15)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 6.7.2 Others

**Email discussion summary of [99-e][110] NR\_TEI\_R16, AI 6.7.2 – Peng Zhang**

**R4-2107636 Email discussion summary for [99-e][110]** **NR\_TEI\_R16**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

**Topic #1 Transient period capability**

**R4-2108857 FFT window starting point values for EVM measurements for transient period capability**

*Type: discussion For: Approval  
 Source: Anritsu Limited*

**Decision:** The document was **not treated**.

**R4-2111355 CR for TR 38.101-1 on shorter transient\_r16**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0851 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111356 CR for TR 38.101-1 on shorter transient\_r17**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0852 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111539 Transient Period Capability Measurements**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-16)  
  
 Source: Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

**Topic #2 IBE mask for almost contiguous allocations**

**R4-2111426 IBE mask for almost contiguous allocations**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111418 IBE requirement for almost contiguous allocations**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0861 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111419 IBE requirement for almost contiguous allocations -Mirror**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0862 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Topic #3 Requirement for Type 2 UE RX**

**R4-2109964 Requirements Type 2 UEs supporting inter-band MRDC with overlapping DL**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0556 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to add requirements for Type 2 UE

**Decision:** The document was **not treated**.

**R4-2110006 Requirements Type 2 UEs supporting inter-band MRDC with overlapping DL**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0560 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to add requirements for Type 2 UE

**Decision:** The document was **not treated**.

**R4-2111461 Imbalance Requirement for Type 2 UE RX**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**Topic #4 Others**

**DC\_n46A-n48A MSD**

**R4-2109705 DC\_n46A-n48A MSD due to receiver harmonic mixing analysis**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-16)  
  
 Source: MediaTek Inc.*

**Decision:** The document was **not treated**.

**R4-2109721 CR to 38.101-1 for missing MSD due to receiver harmonic mixing for combos with n46**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0785 rev Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

**Abstract:**

Introduce missing MSD due to receiver harmonic mixing for combos with n46.

**Decision:** The document was **not treated**.

**R4-2109722 CR to 38.101-1 for missing MSD due to receiver harmonic mixing for combos with n46**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0786 rev Cat: A (Rel-17)  
  
 Source: MediaTek Inc.*

**Abstract:**

Introduce missing MSD due to receiver harmonic mixing for combos with n46.

**Decision:** The document was **not treated**.

**R4-2109723 CR to 38.101-3 for missing MSD due to cross band and MSD due to receiver harmonic mixing for combos with n46**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0544 rev Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

**Abstract:**

Introduce missing MSD due to cross band and MSD due to receiver harmonic mixing for combos with n46.

**Decision:** The document was **not treated**.

**R4-2109724 CR to 38.101-3 for missing MSD due to cross band and MSD due to receiver harmonic mixing for combos with n46**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0545 rev Cat: A (Rel-17)  
  
 Source: MediaTek Inc.*

**Abstract:**

Introduce missing MSD due to cross band and MSD due to receiver harmonic mixing for combos with n46.

**Decision:** The document was **not treated**.

**ENDC coexistence**

**R4-2111394 CR for 38.101-3 missing ENDC coexistence**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0599 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111395 CR for 38.101-3 missing ENDC coexistence -Mirror**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0600 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**SRS IL**

**R4-2110816 R16 SRS IL update**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110935 R16 CR on SRS IL**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0831 rev Cat: F (Rel-16)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110936 R17 mirror CR on SRS IL**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0832 rev Cat: A (Rel-17)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

## 7 Rel-17 maintenance for both NR and LTE

### 7.1 Introduction of FR2 FWA UE with maximum TRP of 23dBm for n257 and n258

#### 7.1.1 UE RF requirements

#### 7.1.2 RRM core requirements

#### 7.1.3 RRM performance requirements

#### 7.1.4 Others

## 8 Rel-17 spectrum related Work Items for NR

### 8.1 Introduction of lower 6GHz NR unlicensed operation for Europe

**Email discussion summary of [99-e][111] NR\_6GHz\_unlic\_EU, AI 8.1 –Johannes Hejselbaek**

**R4-2107637 Email discussion summary for [99-e][111] NR\_6GHz\_unlic\_EU**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

*Refere to WID RP-210762. Complete dates are June 2021 for Core and Sep. 2021 for Perf.*

*According to the agreed work plan, the targeta for this meeting are*

* *3GPP RAN4#99-e (May 2021)*
* *Agree or endorse TR 38.849 and revised WID if any updates;*
* *Conclude discussions related to* ***core requirements for UE and BS***
* *Endorse BIG CRs for impacted core TSs;*
* *Discussions on conformance requirements for BS testing*
* *Unfinished part in 3GPP RAN4#98-e (Jan. 2021)*
  + *Agree if the* ***frequency range*** *for unlicensed operation in Europe are best introduced to the specification by relevant updates (if any) of band n96 or whether a new band is needed.*
  + *Core requirements for UE and BS*

**GTW sessions on May 20th:**

**Issue 1-3: Inclusion of VLP deployment to 3GPP specification**

* Agreement: Go with Option 2
  + Send LS to regulation to check if the BS is allowed. If there is problem, RAN4 will revisit the agreement.

**Issue 2-1: MPR for LPI deployments**

* Option 1: No changes for MPR as compared to the values captured in WF R4-2105383.
* Option 2: Adopt the proposed values from R4-2109430
* Option 3: Merge/compromise the values from R4-2105383 and R4-2109430 to a combined proposal
* Agreement: Option 3

**Conclusions**

#### 8.1.1 General

**TR 38.849**

**R4-2110691 draft TR 38.849 v0.3.0**

*Type: draft TR For: Agreement  
 38.849 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Inclusion of agreements and TPs provided at RAN4#99

**Decision:** The document was **not treated**.

**Topic #1: Band plan and LPI & VLP deployment**

**R4-2109429 Band plan for lower 6GHz NR unlicensed operation in EU/CEPT**

*Type: discussion For: Decision  
 Source: Apple, Facebook, Hewlett Packard Enterprise, Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

**R4-2110692 On system parameters for the lower 6GHz NR unlicensed operation**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2111165 On NR unlicensed operation for lower 6GHz in Europe**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

On NR unlicensed operation for lower 6GHz in Europe

**Decision:** The document was **not treated**.

R4-2109431 is moved from AI 8.1.4 to AI 8.1.1.

**R4-2109431 On LPI and VLP modes for mixed indoor/outdoor scenarios**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

Part of proposals from R4-2110617, R4-2109431, R4-2109431, and R4-2111408.

#### 8.1.2 UE RF requirements

**Topic #2: UE related requirements**

**R4-2109430 A-MPR for 6GHz NR unlicensed band in EU/CEPT**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110693 On UE RF aspects for the lower 6GHz NR unlicensed operation**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110983 NR-U VLP for EU 6 GHz**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

#### 8.1.3 BS RF requirements

**Topic #3: BS related requirements**

**R4-2110617 Discussion on BS RF requirements for Europe unlicensed 6GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110618 draft CR for introduction of Europe unlicensed 6GHz.**

*Type: other For: Endorsement  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110694 On BS RF aspects for the lower 6GHz NR unlicensed operation**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

R4-2111408 is moved from AI 8.11.1 to AI 8.1.3

**R4-2111408 Discussion on EU band allocation**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discussion on the n96 EU band assignment

**Decision:** The document was **not treated**.

#### 8.1.4 Others

### 8.2 Introduction of NR 47 GHz band

#### 8.2.1 UE RF requirements (38.101-2)

**Email discussion summary of [99-e][112] NR\_47GHz\_Band, AI 8.2.1 & AI 8.2.6 –Hisashi Onozawa**

**R4-2107638 Email discussion summary for [99-e][112]** **NR\_47GHz\_Band**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210827. Completion dates are Sep 21 for Core and Perf.

Remaining open issues:

* *Whether* ***PTRS*** *is configured for UE Tx EVM measurement or not.*
* ***UE RF core requirements for UE power class 1, 2 and 4****.*
* *MU/TT budget for BS Rx RF conformance requirement*
* *RRM CR drafting aligned with RF requirement*
* *UE Demod requirement (whether PN model is revisited or not, etc)*
* *BS Demod requirement and test feasibility (link budget/test configuration)*

**GTW session on May 20th**

**Sub-topic# 1-1 Min peak EIRP**

* Agreement:
  + For PC2, 22.9dBm
  + For PC4, 28.3dBm
  + For PC1, further check the value on minimum peak EIRP
    - Alt 1: 34.5dBm (Qualcomm, DISH, T-Mobile, Sony, Ericsson)
    - Alt 2: Value in the range of 33.8~34dBm (Intel, Mediatek, Huawei, Vivo)

**Sub-topic 1-2: REFSENS**

* Agreement
  + PC2: -86.8dBm
  + PC4: -91.0dBm

**Sub-topic 1-3 Gain drop from peak to spheric**

**Gain drop from minimum peak EIRP to EIRP spherical coverage**

* Agreement
  + PC2: 11.9dBm
  + PC4: 12.1dBm

**Conclusions**

##### 8.2.1.1 Peak EIRP and EIRP spherical coverage

**Topic #1: EIRP/EIS requirements for UE power class 1, 2, and 4.**

**EIRP**

R4-2108813 is moved from 8.2.1 to 8.2.1.1

**R4-2108813 Power class specific parameters for n262**

*Type: other For: Agreement  
 Source: Qualcomm Incorporated*

**Abstract:**

peak gain, spherical coverage of gain discussed

**Decision:** The document was **not treated**.

**R4-2109007 Peak EIRP and EIRP spherical coverage for PC1, PC2, PC4 for n262**

*Type: other For: Approval  
 Source: Sony*

**Decision:** The document was **not treated**.

**R4-2109547 Proposal on n262 PC1/2/4 peak EIRP and EIRP spherical coverage**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2109669 Discussion on EIRP and spherical coverage for PC1,PC2 and PC4**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109789 EIRP requirements for n262 UE power class 1, 2, and 4**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

n262 EIRP is proposed to be 6 dB lower than 28 GHz bands.

**Decision:** The document was **not treated**.

**R4-2110839 EIRP requirement of Band n262 for PC1/2/4**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111063 Peak EIRP requirements for band n262**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2111163 Peak EIRP and EIRP spherical coverage for PC1, PC2, PC4 for n262**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

Peak EIRP and EIRP spherical coverage for PC1, PC2, PC4 for n262

**Decision:** The document was **not treated**.

##### 8.2.1.2 Other UE TX requirements

**Topic #2: MBR, Beam correspondence and UE RF CR**

**R4-2109131 Multi-band relaxation for band n262**

*Type: other For: Approval  
 Source: Murata Manufacturing Co Ltd.*

**Decision:** The document was **not treated**.

Proposals in R4-2109007 and R4-2111163 are taken into account.

**CR and TR**

**R4-2110153 CR to 38.101-2 on side conditions for beam correspondence based on SSB and CSI-RS for n262 (Rel-17)**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0379 rev Cat: F (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109790 Introduction of n262 UE RF requirements**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0372 rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Draft CR is to PC1/2/4 is added on top of the endorsed PC3 CR. Side conditions are corrected.

**Decision:** The document was **not treated**.

R4-2110087 is moved from AI 8.2.6 to AI 8.2.1.2

**R4-2110087 TR 38.847 Introduction of NR Band n262 (47GHz band)**

*Type: draft TR For: Agreement  
 38.847 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Updated TR to capture the work done when specifying the new NR FR2 47GHz band

**Decision:** The document was **not treated**.

##### 8.2.1.3 REFSENS and EIS spherical coverage

**Topic #1: EIRP/EIS requirements for UE power class 1, 2, and 4.**

**EIS**

**R4-2109008 REFSENS and EIS spherical coverage for PC1, PC2, PC4 for n262**

*Type: other For: Approval  
 Source: Sony*

**Decision:** The document was **not treated**.

**R4-2109557 Proposal on n262 PC1/2/4 REFSENS and EIS spherical coverage**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2109670 Discussion on EIS and spherical coverage for PC1,PC2 and PC4**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109791 EIS requirements for n262 UE power class 1, 2, and 4**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

n262 EIS is proposed to be 6 dB relaxed from 28 GHz bands.

**Decision:** The document was **not treated**.

**R4-2110840 EIS requirement of Band n262 for PC1/2/4**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111064 Peak EIS requirements for band n262**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2111164 REFSENS and EIS spherical coverage for PC1, PC2, PC4 for n262**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

REFSENS and EIS spherical coverage for PC1, PC2, PC4 for n262

**Decision:** The document was **not treated**.

##### 8.2.1.4 Other UE RX requirements

#### 8.2.2 BS RF requirements (38.104)

#### 8.2.3 BS conformance (38.141)

#### 8.2.4 RRM requirements (38.133)

#### 8.2.5 Demodulation and CSI requirements

##### 8.2.5.1 UE demodulation (38.101-4)

##### 8.2.5.2 BS demodulation (38.104)

#### 8.2.6 Others

### 8.3 Introduction of NR band n67

**Email discussion summary of [99-e][113] NR\_n67\_n85, AI 8.3 & AI 8.4 –Dominique Evereare**

**R4-2107639 Email discussion summary for [99-e][113]** **NR\_n67\_n85**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-202829 for n67 and the completion date is June 2021 for both Core and Perf.

Refer to WID RP-210707 for n85 and the completion date is June 2021 for both Core and Perf.

Remaining open issues

* *Agree CRs.*

**Conclusions:**

#### 8.3.1 UE RF requirements (38.101-1)

**R4-2110095 CR to TS 38.101-1: Introduction of band n67**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0808 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n67 in NR UE core specifications

**Decision:** The document was **not treated**.

#### 8.3.2 BS RF requirements (38.104)

**R4-2110094 CR to TS 38.104: Introduction of band n67**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0320 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n67 in NR BS core specifications

**Decision:** The document was **not treated**.

**R4-2110096 CR to TS 38.141-1: Introduction of band n67**

*Type: CR For: Agreement  
 38.141-1 v17.1.0 CR-0219 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n67 in NR BS conformance specifications

**Decision:** The document was **not treated**.

**R4-2110097 CR to TS 38.141-2: Introduction of band n67**

*Type: CR For: Agreement  
 38.141-2 v17.1.0 CR-0327 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n67 in NR BS conformance specifications

**Decision:** The document was **not treated**.

**R4-2110099 CR to TS 36.104: Introduction of band n67**

*Type: CR For: Agreement  
 36.104 v17.1.0 CR-4936 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

**R4-2110100 CR to TS 36.141: Introduction of band n67**

*Type: CR For: Agreement  
 36.141 v17.1.0 CR-1307 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

**R4-2110101 CR to TS 37.104: Introduction of band n67**

*Type: CR For: Agreement  
 37.104 v17.1.0 CR-0940 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

**R4-2110102 CR to TS 37.141: Introduction of band n67**

*Type: CR For: Agreement  
 37.141 v17.1.0 CR-0979 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

**R4-2110103 CR to TS 37.105: Introduction of band n67**

*Type: CR For: Agreement  
 37.105 v17.1.0 CR-0233 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

**R4-2110104 CR to TS 37.145-1: Introduction of band n67**

*Type: CR For: Agreement  
 37.145-1 v17.1.0 CR-0260 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

**R4-2110105 CR to TS 37.145-2: Introduction of band n67**

*Type: CR For: Agreement  
 37.145-2 v17.1.0 CR-0303 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n67

**Decision:** The document was **not treated**.

#### 8.3.3 RRM requirements (38.133)

#### 8.3.4 Others

### 8.4 Introduction of NR band n85

**Refer to Email discussion summary of [99-e][113] NR\_n67\_n85, AI 8.3 & AI 8.4 –Dominique Evereare**

#### 8.4.1 UE RF requirements (38.101-1)

**R4-2110107 CR to TS 38.101-1: Introduction of band n85**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0809 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n85 in NR UE core specifications

**Decision:** The document was **not treated**.

#### 8.4.2 BS RF requirements (38.104)

**R4-2110106 CR to TS 38.104: Introduction of band n85**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0321 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n85 in NR BS core specifications

**Decision:** The document was **not treated**.

**R4-2110108 CR to TS 38.141-1: Introduction of band n85**

*Type: CR For: Agreement  
 38.141-1 v17.1.0 CR-0220 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n85 in NR BS conformance specifications

**Decision:** The document was **not treated**.

**R4-2110109 CR to TS 38.141-2: Introduction of band n85**

*Type: CR For: Agreement  
 38.141-2 v17.1.0 CR-0328 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces band n85 in NR BS conformance specifications

**Decision:** The document was **not treated**.

**R4-2110111 CR to TS 36.104: Introduction of band n85**

*Type: CR For: Agreement  
 36.104 v17.1.0 CR-4937 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

**R4-2110112 CR to TS 36.141: Introduction of band n85**

*Type: CR For: Agreement  
 36.141 v17.1.0 CR-1308 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

**R4-2110113 CR to TS 37.104: Introduction of band n85**

*Type: CR For: Agreement  
 37.104 v17.1.0 CR-0941 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

**R4-2110114 CR to TS 37.141: Introduction of band n85**

*Type: CR For: Agreement  
 37.141 v17.1.0 CR-0980 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

**R4-2110115 CR to TS 37.105: Introduction of band n85**

*Type: CR For: Agreement  
 37.105 v17.1.0 CR-0234 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

**R4-2110116 CR to TS 37.145-1: Introduction of band n85**

*Type: CR For: Agreement  
 37.145-1 v17.1.0 CR-0261 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

**R4-2110117 CR to TS 37.145-2: Introduction of band n85**

*Type: CR For: Agreement  
 37.145-2 v17.1.0 CR-0304 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for coexistence with band n85

**Decision:** The document was **not treated**.

#### 8.4.3 RRM requirements (38.133)

#### 8.4.4 Others

### 8.5 Introduction of 900 MHz spectrum to 5G NR applicable for Rail Mobile Radio

#### 8.5.1 General

**Email discussion summary of [99-e][114] RAIL\_900\_1900MHz AI 8.5.1, 8.5.2, 8.5.4 & AI 8.6, 8.6.1, 8.6.2 –Ingo Wendler**

**R4-2107640 Email discussion summary for [99-e][114]** **RAIL\_900\_1900MHz**

*Type: Other For: Information  
 Source: Moderator (Union Inter. Chemins de Fer)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210878 for 900MHz spectrum. Completition date is March 2022 for Core and Perf.

Refer to WID RP-210879 for 1900MHz spectrum. Completion data is March 2022 for Core and Perf.

This is the second WG meeting for them.

**Conclusions**

**Topic #1: General aspects and WID updates**

**R4-2109842 Update WID on introduction of 900 MHz spectrum to 5G NR applicable for Rail Mobile Radio**

*Type: WID revised For: Endorsement  
 Source: Union Inter. Chemins de Fer*

**Decision:** The document was **not treated**.

**R4-2111051 Discussion on general aspects of the RMR 900 WI**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution provide further analysis of the general aspects of the RMR900 topic.

**Decision:** The document was **not treated**.

**R4-2111220 On 900MHz RMR RAN4 requirements impact due to ECC Decision (20)02**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

**Proposal 2**: For UE power class 3, there is no impact to 38.101-1 due to ECC Decision (20)02.

**Decision:** The document was **not treated**.

#### 8.5.2 UE RF requirements

**Topic #2: RMR 900MHz parameters**

**R4-2110956 Consideration for RMR 900MHz band**

*Type: discussion For: (not specified)  
 Source: Huawei Tech.(UK) Co.. Ltd*

**Abstract:**

discussion on UE requirements for RMR 900MHz

**Decision:** The document was **not treated**.

**R4-2110634 Consideration for RMR 900MHz band**

*Type: discussion For: (not specified)  
 Source: Huawei Tech.(UK) Co.. Ltd*

**Abstract:**

discussion on UE requirements for RMR 900MHz

**Decision:** The document was **withdrawn**.

**R4-2110635 Consideration for RMR 900MHz band**

*Type: discussion For: (not specified)  
 Source: Huawei Tech.(UK) Co.. Ltd*

**Abstract:**

discussion on UE requirements for RMR 900MHz

**Decision:** The document was **withdrawn**.

**R4-2110716 Consideration for RMR 900MHz band**

*Type: discussion For: (not specified)  
 Source: Huawei Tech.(UK) Co.. Ltd*

**Abstract:**

Discussion on UE requirements for RMR 900MHz band

**Decision:** The document was **withdrawn**.

#### 8.5.3 BS RF requirements

#### 8.5.4 Others

**Topic #2: RMR 900MHz parameters**

**Channel raster**

**R4-2111054 Discussion on channel raster aspects for RMR 900 WI**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution provide analysis of the channel raster aspects of the RMR900 topic.

**Decision:** The document was **not treated**.

### 8.6 Introduction of 1900 MHz spectrum to 5G NR applicable for Rail Mobile Radio

#### 8.6.1 General

**Refer to Email discussion summary of [99-e][114] RAIL\_900\_1900MHz AI 8.5.1, 8.5.2, 8.5.4 & AI 8.6, 8.6.1, 8.6.2 –Ingo Wendler**

**Topic #3: General aspects and WID updates for 1900MHz**

**R4-2109726 Update on New WID on introduction of 1900MHz spectrum to 5G NR applicable for Rail Mobile Radio**

*Type: WID revised For: Endorsement  
 Source: Union Inter. Chemins de Fer*

**Decision:** The document was **not treated**.

**R4-2111055 Discussion on general aspects of the RMR 1900 WI**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution provide further analysis of the general aspects of the RMR1900 topic.

**Decision:** The document was **not treated**.

**R4-2111221 On 1900MHz RMR RAN4 requirements impact due to ECC Decision (20)02**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

**Proposal 2**: For UE power class 3, there is no impact to 38.101-1 due to ECC Decision (20)02.

**Decision:** The document was **not treated**.

#### 8.6.2 UE RF requirements

**Topic #4: RMR 1900MHz parameters**

**R4-2110958 Introduction of RMR 1900MHz band**

*Type: discussion For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.6.3 BS RF requirements

#### 8.6.4 Others

### 8.7 Introduction of NR band n24

**Email discussion summary of [99-e][115] NR\_LTE\_band\_n24, AI 8.7 & AI 11.8 –Ojas Choksi**

**R4-2107641 Email discussion summary for [99-e][115]** **NR\_LTE\_band\_n24**

*Type: Other For: Information  
 Source: Moderator (Ligado)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-201357 for NR\_band\_n24-Core. Completion date is June 2021 for Core.

Refer to WID RP-201356 for LTE\_B24\_mod. Completion date is June 2021.

Remaining issues

* *Review the A-MPR values in square brackets and finalize them at the RAN4 #98e-bis meeting*.

**Conclusions:**

#### 8.7.1 UE RF requirements (38.101-1)

**R4-2108986 CR for updates related to n24 in 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0752 rev Cat: F (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

#### 8.7.2 BS RF requirements (38.104)

#### 8.7.3 RRM requirements (38.133)

#### 8.7.4 Others

### 8.8 Issues arising from basket WIs but not subject to block approval

**Email discussion summary of [99-e][116] NR\_Baskets\_Part\_1, AI 8.8, some contributions in AI 8.9.1, 8.16.1, 8.16.2, 8.22 –Dominique Brunel**

**R4-2107642 Email discussion summary for [99-e][116]** **NR\_Baskets\_Part\_1**

*Type: Other For: Information  
 Source: Moderator (Skyworks)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to basket WIDs. The completion date of basket WIDs is March 2022.

**Conclusions**

#### 8.8.1 UE RF requirements

**Topic#1: Inter-band combinations with intra-band UL CA as part of UL configuration**

**R4-2111476 MSD due to IMD from ULCA**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to R4-2107625**.

**R4-2107625 MSD due to IMD from ULCA**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111016 MSD Due to NR Intra-band ULCA IMD within Inter-band Combinations**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution we provide MSD values for inter-band combinations that have intra-band UL CA as part of the UL configuration with detailed explanation for the calculations. This can be used to generate the related CRs and as a template for the analys

**Decision:** The document was **not treated**.

**R4-2108930 MSD analysis for n77(2A) UL cases**

*Type: other For: Approval  
 Source: Nokia, Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

**R4-2108931 draft CR to 38.101-1: CA\_n5A-n77(2A) introduction of UL CA\_n77(2A)**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2108932 draft CR to 38.101-1: CA\_n2-n77**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Skyworks Solutions Inc., AT&T*

**Decision:** The document was **not treated**.

**R4-2111475 Triple beat and 3ULCC MSD**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to R4-2107627**.

**R4-2107627 Triple beat and 3ULCC MSD**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109262 CR for Pcmax - NR-DC for DC cat. A-B combinations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0768 rev Cat: B (Rel-17)  
  
 Source: InterDigital Communications*

**Abstract:**

Introduction of specific Pcmax requirements for inter-band NR-DC category A-B combos in sub-clause 6.2B.4.1 and add the required information in sub-clauses 6.2B.2, 6.2B.3. This is the formal CR submission based on the draft CR in R4-2105340 that has been

**Decision:** The document was **not treated**.

**Topic #2: LB-LB and LB-LB-LB combinations**

**R4-2111478 LB\_LB\_MB MSD and LB\_LB\_LB Feasibility**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110243 TP for TR 37.717-21-11: DC\_8A-20A\_n28A**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Topic #3: Update of ENDC test points for new n77 FCC frequency range**

**R4-2110158 MSD test points for US EN-DC combinations with n77**

*Type: other For: Approval  
 38.101-3 v CR- rev Cat: (Rel-17)  
  
 Source: Apple*

It is moved from AI 8.22.

**Decision:** The document was **not treated**.

**R4-2110159 CR for TS 38.101-3: MSD test configurations modifications for US EN-DC combinations with Band n77**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0567 rev Cat: F (Rel-17)  
  
 Source: Apple*

It is moved from AI 8.22.

**Decision:** The document was **not treated**.

**Topic#4: DC\_(n)71AA BCS2 and MSD test points**

**R4-2109630 MSD for DC\_(n)71AA BCS2**

*Type: pCR For: Approval  
 38.717-01-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: MediaTek Inc.*

It is moved from AI 8.9.2.

**Decision:** The document was **not treated**.

**R4-2111534 Single Uplink REFSENS for DC\_(n)71AA**

*Type: discussion For: Approval  
 38.101-3 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

It is moved from AI 8.16.2.

**Decision:** The document was **revised to R4-2107626**.

**R4-2107626 Single Uplink REFSENS for DC\_(n)71AA**

*Type: discussion For: Approval  
 38.101-3 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

It is moved from AI 8.16.2.

**Decision:** The document was **not treated**.

**R4-2111487 Impact on TS 38.101-3 due to the introduction of BCS2 for DC\_(n)71AA**

*Type: discussion For: Approval  
 Source: T-Mobile USA, Skyworks Solutions*

It is moved from AI 8.16.2.

**Decision:** The document was **not treated**.

**R4-2111488 Draft CR for 38.101-3: Introduction of DC\_(n)71AA\_BCS2**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: T-Mobile USA, Skyworks Solutions*

It is moved from AI 8.16.2.

**Decision:** The document was **not treated**.

**Topic #5: Discussions on band combinations MSD, rules and simplifications**

**R4-2110080 Discussion on the rules of NE-DC with contiguous intra-band NR and LTE carriers**

*Type: discussion For: Approval  
 Source: Huawei,HiSilicon*

**Abstract:**

Discussion on the rules of NE-DC with contiguous intra-band NR and LTE carriers

It is moved from AI 8.16.1.

**Decision:** The document was **not treated**.

**R4-2111537 Intra-Band Single Uplink REFSENS Simplification**

*Type: discussion For: Approval  
 38.101-3 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

It is moved from AI 8.16.2.

**Decision:** The document was **not treated**.

**R4-2111492 MSD and real-world implications**

*Type: discussion For: Approval  
 Source: T-Mobile USA, Deutsche Telekom, Verizon, CHTTL, AT&T, Dish Network*

**Decision:** The document was **not treated**.

**Topic #6: NR-U intra-band UL CA**

**R4-2111253 Introducing NR-U Intra-band UL CA UE RF requirements**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Abstract:**

NR-U Intra-band UL CA UE RF requirements

**Decision:** The document was **not treated**.

#### 8.8.2 Others

**Topic #7: Way of working for combinations not for block approval**

**R4-2111481 Way of working for combination not for block approval**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we describe the way of working for the "not for block approval" AI and its interaction with the band combination WI rapporteurs.

**Decision:** The document was **not treated**.

### 8.9 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y)

**Email discussion summary of [99-e][117] NR\_Baskets\_Part\_2, AI 8.9, AI 8.16~8.20 –Iwo Angelow**

**R4-2107643 Email discussion summary for [99-e][117]** **NR\_Baskets\_Part\_2**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

#### 8.9.1 Rapporteur Input (WID/TR/CR)

**R4-2111069 Revised WID NR Intra-band Rel-17**

*Type: WID revised For: Endorsement  
 Source: Ericsson*

**Abstract:**

Revised WID NR Intra-band Rel-17

**Decision:** The document was **not treated**.

**R4-2111073 CR 38.101-1 new combinations Rel-17 NR Intra-band**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0843 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-1 new combinations Rel-17 NR Intra-band

**Decision:** The document was **not treated**.

**R4-2111074 CR 38.101-2 new combinations Rel-17 NR Intra-band**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0389 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-2 new combinations Rel-17 NR Intra-band

**Decision:** The document was **not treated**.

**R4-2111079 TR 38.717-01-01 v0.5.0 Rel-17 NR Intra-band**

*Type: draft TR For: Endorsement  
 38.717-01-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

TR 38.717-01-01 v0.5.0 Rel-17 NR Intra-band

**Decision:** The document was **not treated**.

**R4-2111104 CR 38101-1-h10 correction non-contiguous intra-band config table**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0849 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38101-1-h10 correction non-contiguous intra-band config table

**Decision:** The document was **not treated**.

#### 8.9.2 UE RF requirements for FR1

#### 8.9.3 UE RF requirements for FR2

**R4-2109746 dCR to 38.101-3 addition on CA\_n258 intrband CA combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA, Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111089 Rel-17 CR 38101-2-h10 corrections intra-band CA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0391 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-2-h10 corrections intra-band CA

**Decision:** The document was **revised to R4-2107689**.

**R4-2107689 Rel-17 CR 38101-2-h10 corrections intra-band CA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0391 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-2-h10 corrections intra-band CA

**Decision:** The document was **not treated**.

### 8.10 NR inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1, 2)

**Email discussion summary of [99-e][118] NR\_Baskets\_Part\_3, AI 8.10~8.15, AI 8.21~8.25 – Johannes Hejselbaek**

**R4-2107644 Email discussion summary for [99-e][118]** **NR\_Baskets\_Part\_3**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Conclusions**

#### 8.10.1 Rapporteur Input (WID/TR/CR)

**R4-2110461 Revised WID on Rel-17 NR Inter-band CA\_DC xUL\_2DL (x=1,2)**

*Type: WID revised For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110462 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0826 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110463 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into TS 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0388 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110464 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0575 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110999 TR 38.717-02-01 v0.5.0**

*Type: draft TR For: Discussion  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

#### 8.10.2 NR inter band CA requirements without any FR2 band(s)

**R4-2108861 Draft CR on CA\_n1-n3, CA\_n1-n78, CA\_n3-n78**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: China Unicom, ZTE*

**Decision:** The document was **revised to R4-2107691**.

**R4-2107691 Draft CR on CA\_n1-n3, CA\_n1-n78, CA\_n3-n78**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: China Unicom, ZTE*

**Decision:** The document was **not treated**.

**R4-2109264 Add channel bandwidth configuration for CA\_n46A-n48A**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0769 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding CA\_n46N-n48A channel bandwidth configuration

**Decision:** The document was **not treated**.

**R4-2109265 Add channel bandwidth configuration for CA\_n46A-n48A**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0770 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding CA\_n46N-n48A channel bandwidth configuration

**Decision:** The document was **revised to R4-2107692**.

**R4-2107692 Add channel bandwidth configuration for CA\_n46A-n48A**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0770 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding CA\_n46N-n48A channel bandwidth configuration

**Decision:** The document was **not treated**.

**R4-2109266 Adding new CA\_n46N-n48A configurations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0771 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding:

CA\_n46N-n48A

CA\_n46N-n48B

CA\_n46N-n48C

**Decision:** The document was **not treated**.

**R4-2109267 Adding new CA\_n46N-n48A configurations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0772 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding:

CA\_n46N-n48A

CA\_n46N-n48B

CA\_n46N-n48C

**Decision:** The document was **not treated**.

**R4-2109268 Adding new CA\_n46N-n48A configurations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0773 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding:

CA\_n46N-n48A

CA\_n46N-n48B

CA\_n46N-n48C

**Decision:** The document was **revised to R4-2107693**.

**R4-2107693 Adding new CA\_n46N-n48A configurations**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0773 rev Cat: B (Rel-17)  
  
 Source: Charter Communications, Inc*

**Abstract:**

Adding:

CA\_n46N-n48A

CA\_n46N-n48B

CA\_n46N-n48C

**Decision:** The document was **not treated**.

**R4-2109273 TP to TR 38.717.02-01 for CA\_n48-n96 and DC\_n48-n96**

*Type: Work Plan For: Approval  
 Source: Charter Communications, Inc*

**Decision:** The document was **not treated**.

**R4-2109397 TP to TR 38.717-02-01 Addition of CA\_n2A-n12A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109398 TP to TR 38.717-02-01 Addition of CA\_n2A-n14A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109399 TP to TR 38.717-02-01 Addition of CA\_n5A-n12A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109400 TP to TR 38.717-02-01 Addition of CA\_n12A-n30A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107694**.

**R4-2107694 TP to TR 38.717-02-01 Addition of CA\_n12A-n30A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109401 TP to TR 38.717-02-01 Addition of CA\_n12A-n66A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107695**.

**R4-2107695 TP to TR 38.717-02-01 Addition of CA\_n12A-n66A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109402 TP to TR 38.717-02-01 Addition of CA\_n14A-n30A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107696**.

**R4-2107696 TP to TR 38.717-02-01 Addition of CA\_n14A-n30A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109403 TP to TR 38.717-02-01 Addition of CA\_n14A-n66A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109468 Draft CR for TS 38.101-1: Support of n77(2A) in DC\_n77-n79**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109776 draft CR CA\_n25\_n66\_n77 to TS 38.101-1**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CA\_n25(2A)-n66(2A)-n77A,

CA\_n25(2A)-n66A-n77(2A), and CA\_n25(2A)-n66(2A)-n77(2A) are introduced.

**Decision:** The document was **not treated**.

**R4-2109777 draft CR to add new BCS for CA\_n7-n78 to TS 38.101-1**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

BCS1 for CA\_n7(2A)-n78A and CA\_n7(2A)-n78(2A) are introduced.

**Decision:** The document was **not treated**.

**R4-2109876 TP for TR 38.717-02-01: CA\_n28-n74**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, KDDI*

**Decision:** The document was **revised to R4-2107697**.

**R4-2107697 TP for TR 38.717-02-01: CA\_n28-n74**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, KDDI*

**Decision:** The document was **not treated**.

**R4-2109877 TP for TR 38.717-02-01: CA\_n74-n77**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, KDDI*

**Decision:** The document was **revised to R4-2107698**.

**R4-2107698 TP for TR 38.717-02-01: CA\_n74-n77**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, KDDI*

**Decision:** The document was **not treated**.

**R4-2110452 TP for TR 38.717-02-01: CA\_n3A-n34A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to R4-2107699**.

**R4-2107699 TP for TR 38.717-02-01: CA\_n3A-n34A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110453 TP for TR 38.717-02-01: CA\_n8A-n34A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110668 DraftCR for 38.101-1: CA\_n66A-n78(2A)**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110696 TP to TR 38.717-02-01 Addition of CA\_n25-n48**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **revised to R4-2107700**.

**R4-2107700 TP to TR 38.717-02-01 Addition of CA\_n25-n48**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2110701 TP to TR 38.717-02-01 Addition of CA\_n5A-n14A**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2111010 draft CR to 38.101-1: CA\_n48-n71**

*Type: CR For: Approval  
 38.101-1 v17.1.0 CR-0839 rev Cat: B (Rel-17)  
  
 Source: CableLabs*

**Decision:** The document was **withdrawn**.

**R4-2111017 draft CR to 38.101-1: DC\_n48-n71**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0842 rev Cat: B (Rel-17)  
  
 Source: CableLabs*

**Decision:** The document was **withdrawn**.

**R4-2111020 TP to TR 38.717-02-01: CA\_n48-n71 and DC\_n48-n71**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CableLabs, Comcast*

**Decision:** The document was **not treated**.

**R4-2111024 draft CR to 38.101-1: CA\_n48-n71**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: CableLabs, Comcast*

**Decision:** The document was **not treated**.

**R4-2111026 draft CR to 38.101-1: DC\_n48-n71**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: CableLabs, Comcast*

**Decision:** The document was **not treated**.

**R4-2111087 Rel-17 CR 38101-1-h10 corrections 1 band NR and 2 band NR CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0847 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-1-h10 corrections 1 band NR and 2 band NR CA

**Decision:** The document was **revised to R4-2107701**.

**R4-2107701 Rel-17 CR 38101-1-h10 corrections 1 band NR and 2 band NR CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0847 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-1-h10 corrections 1 band NR and 2 band NR CA

**Decision:** The document was **not treated**.

**R4-2111090 Rel-17 CR 38101-2-h10 corrections 2 band NR CA**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0392 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-2-h10 corrections 2 band NR CA

**Decision:** The document was **not treated**.

**R4-2111103 draft CR to 38.101-1 to add new BCS for CA\_n7-n78**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Telstra*

**Abstract:**

draft CR to 38.101-1 to add new BCS for CA\_n7-n78

**Decision:** The document was **not treated**.

R4-2109778 is moved from AI 5.1.7.2 to AI 8.10.2

**R4-2109778 draft CR to fix BCS for CA\_n7-n66**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Typos in BCS of CA\_n7A-n66A, CA\_n7A-n66(2A), CA\_n7(2A)-n66A are corrected.

**Decision:** The document was **not treated**.

#### 8.10.3 NR inter band CA requirements with at least one FR2 band

**R4-2108862 Draft CR on CA-DC of n1,n3,n78 and n258**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: China Unicom, ZTE*

**Decision:** The document was **not treated**.

**R4-2110451 draft CR to TS38.101-3: Adding CA\_n34A/n39A/n40A-n258A**

*Type: draftCR For: Approval  
 38.101-2 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111091 Rel-17 CR 38101-3-h10 corrections 2 band NR CA**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0592 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections 2 band NR CA

**Decision:** The document was **revised to R4-2107702**.

**R4-2107702 Rel-17 CR 38101-3-h10 corrections 2 band NR CA**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0592 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections 2 band NR CA

**Decision:** The document was **not treated**.

**R4-2111162 TP for TR 38.717-02-01 to include DC\_n78-n258**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson,Telstra*

**Abstract:**

TP for TR 38.717-02-01 to include DC\_n78-n258

**Decision:** The document was **revised to R4-2107703**.

**R4-2107703 TP for TR 38.717-02-01 to include DC\_n78-n258**

*Type: pCR For: Approval  
 38.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson,Telstra*

**Abstract:**

TP for TR 38.717-02-01 to include DC\_n78-n258

**Decision:** The document was **not treated**.

### 8.11 NR Inter-band Carrier Aggregation for 3 bands DL with 1 band UL

#### 8.11.1 Rapporteur Input (WID/TR/CR)

**R4-2109121 TR 38.717-03-01 on Rel-17 NR inter-band Carrier Aggregation (CA) for 3 Down Link (DL) / 1 Up Link (UL)**

*Type: draft TR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109122 Revised WID on Rel-17 NR inter-band CA of 3DL bands and 1UL band**

*Type: WID revised For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

#### 8.11.2 UE RF requirements

**R4-2108863 Draft CR on CA\_n1-n3-n78**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: China Unicom*

**Decision:** The document was **revised to R4-2107704**.

**R4-2107704 Draft CR on CA\_n1-n3-n78**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: China Unicom*

**Decision:** The document was **not treated**.

**R4-2108935 TP to TR 38.717-03-01: CA\_n2-n30-n66**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2108936 TP to TR 38.717-03-01: CA\_n5-n30-n66**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **revised to R4-2107705**.

**R4-2107705 TP to TR 38.717-03-01: CA\_n5-n30-n66**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2108979 TP for TR 38.717-03-01 for single uplink CA\_n2-n77-n260 Carrier Aggregation requirements**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108980 TP for TR 38.717-03-01 for single uplink CA\_n2-n77-n261 Carrier Aggregation requirements**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108981 TP for TR 38.717-03-01 for single uplink CA\_n5-n77-n260 Carrier Aggregation requirements**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108982 TP for TR 38.717-03-01 for single uplink CA\_n5-n77-n261 Carrier Aggregation requirements**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108983 TP for TR 38.717-03-01 for single uplink CA\_n66-n77-n260 Carrier Aggregation requirements**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108984 TP for TR 38.717-03-01 for single uplink CA\_n66-n77-n261 Carrier Aggregation requirements**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108985 DraftCR for inter band 3DL/1UL NR CA combinations for 38.101-3**

*Type: draftCR For: Approval  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108995 TP for TR 38.717-03-01: CA\_n24-n41-n48 combinations**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **revised to R4-2107706**.

**R4-2107706 TP for TR 38.717-03-01: CA\_n24-n41-n48 combinations**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108996 TP for TR 38.717-03-01: CA\_n24-n41-n77 combinations**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **revised to R4-2107707**.

**R4-2107707 TP for TR 38.717-03-01: CA\_n24-n41-n77 combinations**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108997 TP for TR 38.717-03-01: CA\_n24-n48-n77 combinations**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **revised to R4-2107708**.

**R4-2107708 TP for TR 38.717-03-01: CA\_n24-n48-n77 combinations**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2109123 CR on Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0755 rev Cat: B (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109124 CR on Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0526 rev Cat: B (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109470 TP for TR 38.717-03-01: CA\_n3-n77-n79**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **revised to R4-2107709**.

**R4-2107709 TP for TR 38.717-03-01: CA\_n3-n77-n79**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2110458 TP for TR38.717-03-01\_CA\_n41A-n79A-n258A**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to R4-2107710**.

**R4-2107710 TP for TR38.717-03-01\_CA\_n41A-n79A-n258A**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110676 TP for TR 38.717-03-01: CA\_n25-n71-n78**

*Type: pCR For: Approval  
 38.717-03-01 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110702 TP to TR 38.717-03-01 Addition of CA\_n14-n66-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110703 TP to TR 38.717-03-01 Addition of CA\_n14-n30-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110704 TP to TR 38.717-03-01 Addition of CA\_n5-n14-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **revised to R4-2107711**.

**R4-2107711 TP to TR 38.717-03-01 Addition of CA\_n5-n14-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110705 TP to TR 38.717-03-01 Addition of CA\_n2-n14-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **revised to R4-2107712**.

**R4-2107712 TP to TR 38.717-03-01 Addition of CA\_n2-n14-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110706 TP to TR 38.717-03-01 Addition of CA\_n12-n66-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110707 TP to TR 38.717-03-01 Addition of CA\_n12-n30-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110708 TP to TR 38.717-03-01 Addition of CA\_n2-n12-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110709 TP to TR 38.717-03-01 Addition of CA\_n5-n12-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110710 TP to TR 38.717-03-01 Addition of CA\_n2-n5-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110711 TP to TR 38.717-03-01 Addition of CA\_n5-n30-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110712 TP to TR 38.717-03-01 Addition of CA\_n2-n30-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2110713 TP to TR 38.717-03-01 Addition of CA\_n30-n66-n77**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2111099 TP for TR 38.717-03-01 to include CA\_n7-n25-n78**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Bell Mobility*

**Abstract:**

TP for TR 38.717-03-01 to include CA\_n7-n25-n78

**Decision:** The document was **not treated**.

**R4-2111160 TP for TR 38.717-03-01 to include CA\_n7-n78-n258**

*Type: pCR For: Approval  
 38.717-03-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson,Telstra*

**Abstract:**

TP for TR 38.717-03-01 to include CA\_n7-n78-n258

**Decision:** The document was **not treated**.

### 8.12 NR Inter-band Carrier Aggregation for 4 bands DL with 1 band UL

#### 8.12.1 Rapporteur Input (WID/TR/CR)

**R4-2111071 Revised WID 4 bands NR CA Rel-17**

*Type: WID revised For: Endorsement  
 Source: Ericsson*

**Abstract:**

Revised WID 4 bands NR CA Rel-17

**Decision:** The document was **not treated**.

**R4-2111076 CR 38.101-1 new combinations NR Inter-band 4 bands CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0844 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-1 new combinations NR Inter-band 4 bands CA

**Decision:** The document was **not treated**.

**R4-2111077 CR 38.101-3 new combinations NR Inter-band 4 bands CA**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0589 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-3 new combinations NR Inter-band 4 bands CA

**Decision:** The document was **not treated**.

**R4-2111081 TR 38.717-04-01 v0.5.0 Rel-17 NR Inter-band 4 bands CA**

*Type: draft TR For: Endorsement  
 38.717-04-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

TR 38.717-04-01 v0.5.0 Rel-17 NR Inter-band 4 bands CA

**Decision:** The document was **not treated**.

#### 8.12.2 UE RF requirements

**R4-2110677 TP for TR 38.717-04-01: CA\_n5-n25-n66-n78**

*Type: pCR For: Approval  
 38.717-04-01 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110679 DraftCR for 38.101-1:CA\_n7-n25-n66-n78**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110681 TP for TR 38.717-04-01: CA\_n13A-n25A-n66A-N77a**

*Type: pCR For: Approval  
 38.717-04-01 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2111101 TP for TR 38.717-04-01 to include CA\_n25-n41-n66-n77**

*Type: pCR For: Approval  
 38.717-04-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Bell Mobility*

**Abstract:**

TP for TR 38.717-04-01 to include CA\_n25-n41-n66-n77

**Decision:** The document was **not treated**.

### 8.13 NR Inter-band Carrier Aggregation/Dual connectivity for 3 bands DL with 2 bands UL

#### 8.13.1 Rapporteur Input (WID/TR/CR)

**R4-2110465 Revised WID on Rel-17 NR Inter-band Carrier AggregationDual Connectivity for 3 bands DL with 2 bands UL**

*Type: WID revised For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110466 CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0827 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111000 TR 38.717-03-02 v0.5.0**

*Type: draft TR For: Discussion  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

#### 8.13.2 UE RF requirements

**R4-2108933 TP to TR 38.717-03-02: CA\_n2-n30-n66**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2108934 TP to TR 38.717-03-02: CA\_n5-n30-n66**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **revised to R4-2107713**.

**R4-2107713 TP to TR 38.717-03-02: CA\_n5-n30-n66**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, AT&T*

**Decision:** The document was **not treated**.

**R4-2109292 DraftCR for inter band 3DL/2UL NR CA DC combinations**

*Type: draftCR For: Approval  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2109404 TP to TR 38.717-03-02 Addition of CA\_n2A-n5A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107714**.

**R4-2107714 TP to TR 38.717-03-02 Addition of CA\_n2A-n5A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109405 TP to TR 38.717-03-02 Addition of CA\_n2A-n12A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107715**.

**R4-2107715 TP to TR 38.717-03-02 Addition of CA\_n2A-n12A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109406 TP to TR 38.717-03-02 Addition of CA\_n2A-n14A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107716**.

**R4-2107716 TP to TR 38.717-03-02 Addition of CA\_n2A-n14A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109407 TP to TR 38.717-03-02 Addition of CA\_n2A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107717**.

**R4-2107717 TP to TR 38.717-03-02 Addition of CA\_n2A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109408 TP to TR 38.717-03-02 Addition of CA\_n5A-n12A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107718**.

**R4-2107718 TP to TR 38.717-03-02 Addition of CA\_n5A-n12A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109409 TP to TR 38.717-03-02 Addition of CA\_n5A-n14A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107719**.

**R4-2107719 TP to TR 38.717-03-02 Addition of CA\_n5A-n14A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109410 TP to TR 38.717-03-02 Addition of CA\_n5A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107720**.

**R4-2107720 TP to TR 38.717-03-02 Addition of CA\_n5A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109411 TP to TR 38.717-03-02 Addition of CA\_n12A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107721**.

**R4-2107721 TP to TR 38.717-03-02 Addition of CA\_n12A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109412 TP to TR 38.717-03-02 Addition of CA\_n12A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107722**.

**R4-2107722 TP to TR 38.717-03-02 Addition of CA\_n12A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109413 TP to TR 38.717-03-02 Addition of CA\_n14A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107723**.

**R4-2107723 TP to TR 38.717-03-02 Addition of CA\_n14A-n30A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109414 TP to TR 38.717-03-02 Addition of CA\_n14A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107724**.

**R4-2107724 TP to TR 38.717-03-02 Addition of CA\_n14A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109415 TP to TR 38.717-03-02 Addition of CA\_n30A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **revised to R4-2107725**.

**R4-2107725 TP to TR 38.717-03-02 Addition of CA\_n30A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: AT&T, Nokia*

**Decision:** The document was **not treated**.

**R4-2109467 Draft CR for TS 38.101-3: Support of n77(2A) in CA\_n77-n79-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109469 TP for TR 38.717-03-02: CA\_n3-n28-n79**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109471 TP for TR 38.717-03-02: CA\_n3-n79-n257**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109472 TP for TR 38.717-03-02: CA\_n28-n77-n79**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **revised to R4-2107726**.

**R4-2107726 TP for TR 38.717-03-02: CA\_n28-n77-n79**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109473 TP for TR 38.717-03-01: CA\_n28-n79-n257**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2110459 TP for TR38.717-03-02\_CA\_n41A-n79A-n258A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to R4-2107727**.

**R4-2107727 TP for TR38.717-03-02\_CA\_n41A-n79A-n258A**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110669 DraftCR for 38.101-1 to add BCS1 for CA\_n25-n66-n78**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110670 DraftCR for 38.101-1 to add additional combinations for CA\_n7-n66-n78**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110671 DraftCR for 38.101-1 to add additional combinations for CA\_n5-n66-n78**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110672 DraftCR for 38.101-1: CA\_n7-n25-n66**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110673 DraftCR for 38.101-1: CA\_n25A-n66(2A)-n71A**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110674 DraftCR for 38.101-1 to add CA\_n5A-n25(2A)-n78(2A)**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110675 DraftCR for 38.101-1: CA\_n2A-n66A-n77(2A)**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110697 TP to TR 38.717-03-02 Addition of CA\_n25-n48-n66**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **revised to R4-2107728**.

**R4-2107728 TP to TR 38.717-03-02 Addition of CA\_n25-n48-n66**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111083 CR 38.101-1 to re-introduce the 3DL/2UL configuration accidently deleted in R4-2102320**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0845 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-1 to re-introduce the 3DL/2UL configuration accidently deleted in R4-2102320

**Decision:** The document was **not treated**.

**R4-2111088 Rel-17 CR 38101-1-h10 corrections 3 band NR CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0848 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-1-h10 corrections 3 band NR CA

**Decision:** The document was **revised to R4-2107729**.

**R4-2107729 Rel-17 CR 38101-1-h10 corrections 3 band NR CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0848 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-1-h10 corrections 3 band NR CA

**Decision:** The document was **not treated**.

**R4-2111092 Rel-17 CR 38101-3-h10 corrections 3 band NR DC**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0593 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections 3 band NR DC

**Decision:** The document was **not treated**.

**R4-2111098 draft CR 38.101-1 to include new configurations for n25-n41-n77, CA\_n41-n66-n77**

*Type: draftCR For: Endorsement  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Bell Mobility*

**Abstract:**

draft CR 38.101-1 to include new configurations for n25-n41-n77, CA\_n41-n66-n77

**Decision:** The document was **not treated**.

**R4-2111100 TP for TR 38.717-03-02 to include CA\_n7-n25-n78**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Bell Mobility*

**Abstract:**

TP for TR 38.717-03-02 to include CA\_n7-n25-n78

**Decision:** The document was **revised to R4-2107730**.

**R4-2107730 TP for TR 38.717-03-02 to include CA\_n7-n25-n78**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Bell Mobility*

**Abstract:**

TP for TR 38.717-03-02 to include CA\_n7-n25-n78

**Decision:** The document was **not treated**.

**R4-2111161 TP for TR 38.717-03-02 to include CA\_n7-n78-n258**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson,Telstra*

**Abstract:**

TP for TR 38.717-03-02 to include CA\_n7-n78-n258

**Decision:** The document was **revised to R4-2107731**.

**R4-2107731 TP for TR 38.717-03-02 to include CA\_n7-n78-n258**

*Type: pCR For: Approval  
 38.717-03-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson,Telstra*

**Abstract:**

TP for TR 38.717-03-02 to include CA\_n7-n78-n258

**Decision:** The document was **not treated**.

### 8.14 NR inter-band Carrier Aggregation and Dual connectivity for DL 4 bands and 2UL bands

#### 8.14.1 Rapporteur Input (WID/TR/CR)

**R4-2109611 CR on introduction of completed NR CA/DC combs with 4DL/2UL within FR1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0784 rev Cat: B (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109624 CR on introduction of completed NR CA/DC combs with 4DL/2UL including FR2**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0539 rev Cat: B (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109625 Revised WID on NR CA/DC with 4DL/2UL**

*Type: WID revised For: Information  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109736 TR 38.717-04-02 update version 0.5.0**

*Type: draft TR For: Agreement  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

#### 8.14.2 UE RF requirements

**R4-2110678 TP for TR 38.717-04-02:CA\_n5-n25-n66-n78**

*Type: pCR For: Approval  
 38.717-04-02 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110680 TP for TR 38.717-04-02: CA\_n7-n25-n66-n78**

*Type: pCR For: Approval  
 38.717-04-02 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110682 TP for TR 38.717-04-02: CA\_n13A-n25A-n66A-n77A**

*Type: pCR For: Approval  
 38.717-04-02 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Bell Mobility, Telus*

**Decision:** The document was **not treated**.

**R4-2110698 TP to TR 38.717-04-02 Addition of CA\_n25\_n66\_n71\_n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **revised to R4-2107732**.

**R4-2107732 TP to TR 38.717-04-02 Addition of CA\_n25\_n66\_n71\_n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2110699 TP to TR 38.717-04-02 Addition of CA\_n25\_n41\_n71\_n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **revised to R4-2107733**.

**R4-2107733 TP to TR 38.717-04-02 Addition of CA\_n25\_n41\_n71\_n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2110700 TP to TR 38.717-04-02 Addition of CA\_n25\_n41\_n66\_n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **revised to R4-2107734**.

**R4-2107734 TP to TR 38.717-04-02 Addition of CA\_n25\_n41\_n66\_n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111102 TP for TR 38.717-04-02 to include CA\_n25-n41-n66-n77**

*Type: pCR For: Approval  
 38.717-04-02 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Bell Mobility*

**Abstract:**

TP for TR 38.717-04-02 to include CA\_n25-n41-n66-n77

**Decision:** The document was **not treated**.

### 8.15 NR inter-band CA for 5 bands DL with x bands UL (x=1, 2)

#### 8.15.1 Rapporteur Input (WID/TR/CR)

**R4-2109770 Revised WID on NR inter-band CA for 5 bands DL with x bands UL (x=1, 2)**

*Type: WID revised For: Endorsement  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109771 TR 38.717-05-01 v0.3.0**

*Type: draft TR For: Approval  
 38.717-05-01 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

To capture the approved TPs in this meeting

**Decision:** The document was **not treated**.

**R4-2109772 CR on Introduction of completed 5 bands inter-band CA into TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0788 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.15.2 UE RF requirements

### 8.16 DC of 1 LTE band and 1 NR band

#### 8.16.1 Rapporteur Input (WID/TR/CR)

**R4-2110580 TR 37.717-11-11 v0.5.0 Rel-17 Dual Connectivity (DC) of 1 LTE band (1DL/1UL) and 1 NR band (1DL/1UL)**

*Type: draft TR For: Approval  
 37.717-11-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CHTTL*

**Decision:** The document was **not treated**.

**R4-2110595 Revised WID for Rel-17 Dual Connectivity (DC) of 1 LTE band (1DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Approval  
 Source: CHTTL*

**Decision:** The document was **not treated**.

**R4-2110714 Big CR for Rel-17 Dual Connectivity (DC) of 1 LTE band (1DL/1UL) and 1 NR band (1DL/1UL)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0583 rev Cat: B (Rel-17)  
  
 Source: CHTTL*

**Decision:** The document was **not treated**.

#### 8.16.2 EN-DC requirements without FR2 band

**R4-2110038 Draft CR for new 2UL2DL EN-DC including DL n77(2A) or DL n78(2A)**

*Type: draftCR For: (not specified)  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2110287 Draft CR for 38.101-3 to add the configuration DC\_20A\_n78C**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.16.3 EN-DC requirements with FR2 band

**R4-2108864 Draft CR on EN-DC of B1,B8 and n258**

*Type: draftCR For: Approval  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: China Unicom*

**Decision:** The document was **not treated**.

**R4-2111093 Rel-17 CR 38101-3-h10 corrections EN-DC 1 band LTE + 1 band NR**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0594 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections EN-DC 1 band LTE + 1 band NR

**Decision:** The document was **not treated**.

**R4-2111158 draft CR to 38.101-3 to add configurations for DC\_3\_n258**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Telstra*

**Abstract:**

draft CR to 38.101-3 to add configurations for DC\_3\_n258

**Decision:** The document was **not treated**.

### 8.17 DC of 2 LTE band and 1 NR band

#### 8.17.1 Rapporteur Input (WID/TR/CR)

**R4-2110665 TR 37.717-21-11 V0.5.0 for DC of 2 LTE band and 1 NR band**

*Type: draft TR For: Approval  
 37.717-21-11 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110666 Revised WID: Dual Connectivity (DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Endorsement  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.17.2 EN-DC requirements without FR2 band

**R4-2109463 TP update for TR 37.717-21-11: EN-DC\_1-11\_n41**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: SoftBank Corp., Samsung, KDDI*

**Decision:** The document was **not treated**.

**R4-2109792 TP to TR 37.717-21-11 DC\_13-48\_n77**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Verizon*

**Abstract:**

DC config DC\_13A-48A\_n77A is introduced.

**Decision:** The document was **not treated**.

**R4-2109793 TP to TR 37.717-21-11 DC\_48-66\_n77**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Verizon*

**Abstract:**

DC config DC\_48A-66A\_n77A is introduced.

**Decision:** The document was **not treated**.

**R4-2109918 MSD results for PC3 NR inter-band DC band combinations**

*Type: discussion For: Approval  
 Source: LG Electronics France*

**Abstract:**

Provide MSD results for DC\_1A-11A\_n41A in DC\_2band LTE and 1 band NR combinations.

**Decision:** The document was **not treated**.

**R4-2110047 draft CR for new 2UL3DL EN-DC including n77(2A) or n78(2A)**

*Type: draftCR For: (not specified)  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **withdrawn**.

**R4-2110048 draft CR for new 2UL3DL EN-DC including n77(2A) or n78(2A)**

*Type: draftCR For: (not specified)  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **withdrawn**.

**R4-2110076 draft CR for new 2UL3DL EN-DC including DL n77(2A) or DL n78(2A)**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2110240 TP for TR 37.717-21-11: DC\_20A-28A\_n1A**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110241 TP for TR 37.717-21-11: DC\_8A-20A\_n1A**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Vodafone*

**Decision:** The document was **not treated**.

**R4-2110242 TP for TR 37.717-21-11: DC\_8A-20A\_n3A**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Vodafone*

**Decision:** The document was **revised to R4-2107688**.

**R4-2107688 TP for TR 37.717-21-11: DC\_8A-20A\_n3A**

*Type: pCR For: Approval  
 37.717-21-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon, Vodafone*

**Decision:** The document was **not treated**.

**R4-2110244 Draft CR for 38.101-3 to add the configuration DC\_1A-32A\_n78C**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110245 Draft CR for 38.101-3 to add the configuration DC\_3A-32A\_n78C**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110246 Draft CR for 38.101-3 to add the configuration DC\_20A-32A\_n78C**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.17.3 DMEN-DC requirements with FR2 band

**R4-2111094 Rel-17 CR 38101-3-h10 corrections EN-DC 2 band LTE + 1 band NR**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0595 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections EN-DC 2 band LTE + 1 band NR

**Decision:** The document was **not treated**.

### 8.18 DC of 3 LTE band and 1 NR band

#### 8.18.1 Rapporteur Input (WID/TR/CR)

**R4-2111070 Revised WID LTE 3DL and one NR band Rel-17**

*Type: WID revised For: Endorsement  
 Source: Ericsson*

**Abstract:**

Revised WID LTE 3DL and one NR band Rel-17

**Decision:** The document was **not treated**.

**R4-2111080 TR 37.717-31-11 v0.5.0 Rel-17 DC combinations LTE 3DL and one NR band**

*Type: draft TR For: Endorsement  
 37.717-31-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

TR 37.717-31-11 v0.5.0 Rel-17 DC combinations LTE 3DL and one NR band

**Decision:** The document was **not treated**.

#### 8.18.2 EN-DC requirements without FR2 band

**R4-2110078 draft CR for new 2UL4DL EN-DC including DL n77(2A) or DL n78(2A)**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2110247 Draft CR for 38.101-3 to add the configuration DC\_1A-3A-32A\_n78C**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110248 TP for TR 37.717-31-11: DC\_3A-20A-28A\_n1A**

*Type: pCR For: Approval  
 37.717-31-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110249 TP for TR 37.717-31-11: DC\_7A-20A-28A\_n1A**

*Type: pCR For: Approval  
 37.717-31-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.18.3 EN-DC requirements with FR2 band

**R4-2110775 draft CR for DC\_3-7-8\_n257, DC\_3-3-7-8\_n257, DC\_3-7-7-8\_n257, DC\_3-3-7-7-8\_n257**

*Type: draftCR For: (not specified)  
 38.101-3 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: CHTTL*

**Decision:** The document was **not treated**.

**R4-2111095 Rel-17 CR 38101-3-h10 corrections EN-DC 3 band LTE + 1 band NR**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0596 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections EN-DC 3 band LTE + 1 band NR

**Decision:** The document was **not treated**.

### 8.19 DC of 4 LTE band and 1 NR band

#### 8.19.1 Rapporteur Input (WID/TR/CR)

**R4-2110658 Revised Rel-17 WID on DC of 4 bands LTE inter-band CA (4DL1UL) and 1 NR band (1DL1UL)**

*Type: WID revised For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Inclusion of requests provided at RAN4#99

**Decision:** The document was **not treated**.

**R4-2110683 CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0582 rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Inclusion of approved combinations provided at RAN4#98bis and 99

**Decision:** The document was **not treated**.

**R4-2110715 draft TR 37.717-41-11-050**

*Type: draft TR For: Agreement  
 37.717-41-11 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia*

**Abstract:**

Inclusion of TPs provided at RAN4#99

**Decision:** The document was **not treated**.

#### 8.19.2 EN-DC requirements without FR2 band

**R4-2110250 TP for TR 37.717-41-11: DC\_3A-7A-20A-28A\_n1A**

*Type: pCR For: Approval  
 37.717-41-11 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.19.3 EN-DC requirements with FR2 band

**R4-2111096 Rel-17 CR 38101-3-h10 corrections EN-DC 4 band LTE + 1 band NR**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0597 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections EN-DC 4 band LTE + 1 band NR

**Decision:** The document was **not treated**.

**R4-2111157 draft CR to 38.101-3 to add configurations for DC\_2-29-30-66\_n260**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

draft CR to 38.101-3 to add configurations for DC\_2-29-30-66\_n260

**Decision:** The document was **revised to R4-2107690**.

**R4-2107690 draft CR to 38.101-3 to add configurations for DC\_2-29-30-66\_n260**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

draft CR to 38.101-3 to add configurations for DC\_2-29-30-66\_n260

**Decision:** The document was **not treated**.

### 8.20 DC of 5 bands LTE inter-band CA (5DL/1L) and 1 NR band (1DL/1UL)

#### 8.20.1 Rapporteur Input (WID/TR/CR)

**R4-2109626 CR introduction completed band combinations for Dual Connectivity (DC) of 5 bands LTE inter-band CA (5DL/1UL) and 1 NR band (1DL/1UL)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0540 rev Cat: B (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109627 Revised WID on Dual Connectivity (DC) of 5 bands LTE inter-band CA (5DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Information  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109737 TR 37.717-51-11 update version 0.2.0**

*Type: draft TR For: Agreement  
 37.717-51-11 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

#### 8.20.2 UE RF requirements

### 8.21 DC of x bands (x=1,2, 3, 4) LTE inter-band CA and 2 bands NR inter-band CA

#### 8.21.1 Rapporteur Input (WID/TR/CR)

**R4-2109841 TR 37.717-11-21 v0.5.0 TR update: LTE(xDL/1UL)+ NR(2DL/1UL) DC in Rel-17**

*Type: draft TR For: Agreement  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

Update TR to capture the approved TPs in this meeting.

**Decision:** The document was **not treated**.

**R4-2109857 Revised WID on LTE (xDL/UL x=1.2,3,4) with NR 2 bands (2DL/1UL) DC in Rel-17**

*Type: WID revised For: Agreement  
 Source: LG Electronics France*

**Abstract:**

Revised WID to update DC band combos and add new DC band combos in Rel-17

**Decision:** The document was **not treated**.

**R4-2109875 Introduction CR on new NR DC LTE(xDL/1UL)+ NR(2DL/1UL) band combinations in Rel-17**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0551 rev Cat: B (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

Big CR to capture new DC band combinations in TS38.101-3 in Rel-17

**Decision:** The document was **not treated**.

**R4-2110748 TP for TR 37.717-11-21: UE requirements for DC\_3-7\_n1-n8, DC\_3-3-7\_n1-n8, DC\_3-7-7\_n1-n8, DC\_3-3-7-7\_n1-n8**

*Type: pCR For: Approval  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CHTTL*

**Decision:** The document was **not treated**.

#### 8.21.2 EN-DC requirements including NR inter CA without FR2 band

**R4-2110454 TP for TR 37.717-11-21: DC\_8A\_n39A-n40A**

*Type: pCR For: Approval  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to R4-2107735**.

**R4-2107735 TP for TR 37.717-11-21: DC\_8A\_n39A-n40A**

*Type: pCR For: Approval  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110455 TP for TR 37.717-11-21: DC\_8A\_n39A-n79A**

*Type: pCR For: Approval  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110744 TP for TR 37.717-11-21: UE requirements for DC\_3\_n1-n8, DC\_3-3\_n1-n8, DC\_7\_n1-n8, DC\_7-7\_n1-n8**

*Type: pCR For: Approval  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CHTTL*

**Decision:** The document was **not treated**.

**R4-2110757 TP for TR 37.717-11-21: UE requirements for DC\_3-7\_n1-n8, DC\_3-3-7\_n1-n8, DC\_3-7-7\_n1-n8, DC\_3-3-7-7\_n1-n8**

*Type: pCR For: Approval  
 37.717-11-21 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CHTTL*

**Decision:** The document was **not treated**.

#### 8.21.3 EN-DC requirements including NR inter CA with FR2 band

**R4-2111097 Rel-17 CR 38101-3-h10 corrections EN-DC x band LTE + 2 band NR**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0598 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Rel-17 CR 38101-3-h10 corrections EN-DC x band LTE + 2 band NR

**Decision:** The document was **not treated**.

**R4-2111159 draft CR to 38.101-3 to add UL configurations for DC\_7\_n78-n258**

*Type: draftCR For: Endorsement  
 38.101-3 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson, Telstra*

**Abstract:**

draft CR to 38.101-3 to add UL configurations for DC\_7\_n78-n258

**Decision:** The document was **not treated**.

### 8.22 DC of x bands (x=1,2) LTE inter-band CA (xDL/xUL) and y bands (y=3-x) NR inter-band CA

#### 8.22.1 Rapporteur Input (WID/TR/CR)

**R4-2110468 Revised WID on Rel-17 Dual Connectivity (DC) x bands (x=1,2) LTE inter-band CA (xDL/xUL) and y bands (y=3-x) NR inter-band CA**

*Type: WID revised For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110469 CR to reflect the completed ENDC combinations for 3 bands DL with 3 bands UL into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0576 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110470 TR 37.717-33 v0.4.0**

*Type: draft TR For: Approval  
 37.717-33 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

#### 8.22.2 UE RF requirements

**R4-2110457 TP for TR 37.717-33\_DC\_39A\_n79A-n258A**

*Type: pCR For: Approval  
 37.717-33 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

### 8.23 DC of x bands (x=1,2,3) LTE inter-band CA (xDL/1UL) and 3 bands NR inter-band CA (3DL/1UL)

#### 8.23.1 Rapporteur Input (WID/TR/CR)

**R4-2110471 Revised WID on Rel-17 Dual Connectivity (DC) of x bands (x=1,2,3) LTE inter-band CA (xDL1UL) and 3 bands NR inter-band CA (3DL1UL)**

*Type: WID revised For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110472 CR to reflect the completed DC of x bands (x=1,2,3) LTE inter-band CA (xDL1UL) and 3 bands NR inter-band CA (3DL1UL) into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0577 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110473 TR 37.717-11-31\_v0.3.0**

*Type: draft TR For: Approval  
 37.717-11-31 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

#### 8.23.2 UE RF requirements

**R4-2110456 TP for 37.717-11-31\_DC\_8A\_n39A-n40A-n79A**

*Type: pCR For: Approval  
 37.717-11-31 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

### 8.24 DC of x bands (x=2,3,4) LTE inter-band CA (xDL/1UL) and 1 NR FR1 band (1DL/1UL) and 1 NR FR2 band (1DL/1UL)

#### 8.24.1 Rapporteur Input (WID/TR/CR)

**R4-2109628 CR introduction completed band combinations for Dual Connectivity (DC) of x bands (x=2,3,4) LTE inter-band CA (xDL/1UL) and 1 NR FR1 band (1DL/1UL) and 1 NR FR2 band (1DL/1UL)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0541 rev Cat: B (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109629 Revised WID on Dual Connectivity (DC) of x bands (x=2,3,4) LTE inter-band CA (xDL/1UL) and 1 NR FR1 band (1DL/1UL) and 1 NR FR2 band (1DL/1UL)**

*Type: WID revised For: Information  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109738 TR 37.717-21-22 update version 0.2.0**

*Type: draft TR For: Agreement  
 37.717-21-22 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

#### 8.24.2 UE RF requirements

### 8.25 Band combinations for SA NR supplementary uplink (SUL) NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP)

#### 8.25.1 Rapporteur Input (WID/TR/CR)

**R4-2109766 Revised WID on Band combinations for SA NR Supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP)**

*Type: WID revised For: Endorsement  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109767 TR 37.717-00-00 v0.5.0**

*Type: draft TR For: Approval  
 37.717-00-00 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

To capture the approved TPs in this meeting

**Decision:** The document was **not treated**.

**R4-2109768 CR on Introduction of completed SUL band combinations into TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0787 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109769 CR on Introduction of completed SUL band combinations into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0546 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.25.2 UE RF requirements

**R4-2108939 TP to TR 37.717-00-00 for SUL\_n41A-n97A**

*Type: pCR For: Approval  
 37.717-00-00 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2110251 Draft CR for 38.101-1 to add the configuration SUL\_n41C-n83A SUL\_n41C-n80A and SUL\_n78C-n84A**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110252 Updated TP for TR 37.717-00-00 for CA\_n3\_SUL\_n78-n80**

*Type: pCR For: Approval  
 37.717-00-00 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110253 TP for TR 37.717-00-00 for CA\_n3A\_SUL\_n79A-n80A / CA\_n3A\_SUL\_n79C-n80A**

*Type: pCR For: Approval  
 37.717-00-00 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110254 TP for TR 37.717-00-00 for CA\_n3A\_SUL\_n41A-n80A / CA\_n3A\_SUL\_n41C-n80A**

*Type: pCR For: Approval  
 37.717-00-00 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

### 8.26 Band combinations for Uu and V2X con-current operation

**Email discussion summary of [99-e][119] NR\_LTE\_V2X\_PC5\_combos, AI 8.26 – Yuan Gao**

**R4-2107645 Email discussion summary for [99-e][119]** **NR\_LTE\_V2X\_PC5\_combos**

*Type: Other For: Information  
 Source: Moderator (CATT)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210588. Completion date is March 2022 for Core and Perf.

**Conclusions**

#### 8.26.1 General and Rapporteur Input (WID/TR/CR)

**TR 37.875**

**R4-2109043 TR 37.875, Band combinations for V2X con-current operation**

*Type: draft TR For: Approval  
 37.875 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2111427 TP for 37.875: Scope of NR V2X R17 combinations**

*Type: pCR For: Approval  
 37.875 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.26.2 UE RF requirement for concurrent operation between NR Uu band and NR PC5 band

**Topic #1-1: Sensitivity degradation for V2X\_n79A-n47A and V2X\_n79A-47A**

**R4-2109370 Calculation of delta RIB,V2X for V2X\_n79A-n47A and V2X\_n79A-47A**

*Type: discussion For: Approval  
 38.101 v CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Provides calculation of ?RIB,V2X for V2X\_n79A-n47A and V2X\_n79A-47A

**Decision:** The document was **not treated**.

**R4-2110404 Discussion and TP for TR 37.875 on MSD for V2X\_n79A-n47A and V2X\_n79A\_47A**

*Type: pCR For: Approval  
 37.875 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109041 CR for TS 38.101-1, Introduce new band combination of V2X\_n79A-n47A**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0754 rev Cat: B (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**Other contributions**

**R4-2109038 TP on V2X\_n78A-n47A and V2X\_n78A-47A coexistence study**

*Type: pCR For: Approval  
 37.875 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109039 CR for TS 38.101-1, Introduce new band combination of V2X\_n78A-n47A**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0753 rev Cat: B (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2110403 Draft CR for 38.101-1 to simplify the configuratin and REFSENS for V2X band combinations**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.26.3 UE RF requirement for concurrent operation between LTE Uu band and NR PC5 band

#### 8.26.4 UE RF requirement for concurrent operation between NR Uu band and LTE PC5 band

**R4-2109040 CR for TS 38.101-3, Introduce new band combination of V2X\_n78A-47A**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0523 rev Cat: B (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109042 CR for TS 38.101-3, Introduce new band combination of V2X\_n79A-47A**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0524 rev Cat: B (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

#### 8.26.5 UE RF requirement for concurrent operation of LTE/NR CA/DC band combinations + PC5 V2X

### 8.27 Adding channel bandwidth support to existing NR bands

**Email discussion summary of [99-e][120] NR\_bands\_R17\_BWs, AI 8.27 –Dominique Evereare**

**R4-2107646 Email discussion summary for [99-e][120]** **NR\_bands\_R17\_BWs**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210917. Completion date is Sep. 2021 for Core.

**Conclusions**

#### 8.27.1 General and Rapporteur Input (WID/TR/CR)

**Topic #1: Rapporteur inputs**

**R4-2110091 Revised Basket WID on adding channel bandwidth support to existing NR bands**

*Type: WID revised For: Endorsement  
 Source: Ericsson*

**Abstract:**

This contribution is the revision of the basket WI to include the new requests received before RAN4#99-e meeting and update status of previous requests

**Decision:** The document was **not treated**.

**R4-2110092 Big CR to TS 38.104: Adding channel BW support in existing NR bands**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0319 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This big CR will capture all draft CRs endorsed in RAN4#99-e meeting

**Decision:** The document was **not treated**.

**R4-2110093 Big CR to TS 38.101-1: Adding channel BW support in existing NR bands**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0807 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This big CR will capture all draft CRs endorsed in RAN4#99-e meeting

**Decision:** The document was **not treated**.

#### 8.27.2 UE RF requirements

**Topic #2: Band n40 90 and 100MHz CBW**

R4-2109440 is moved from AI 8.27.2.2 to 8.27.2

**R4-2109440 Discussion on new CBW 90MHz and 100MHz for n40**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110649 Adding 90 and 100MHz bandwidth for band n40**

*Type: other For: Approval  
 Source: Huawei, HiSilicon, CMCC*

**Decision:** The document was **not treated**.

**R4-2110656 Draft CR to 38.101-1: Adding 90 MHz and 100 MHz for band n40**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, CMCC*

**Decision:** The document was **not treated**.

**Topic #3: Band n2 25, 30 and 40MHz CBW**

**R4-2111467 R17 BWs REFSENS**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

##### 8.27.2.1 Reference sensitivity

**Topic #4: Band n5 25MHz CBW**

**R4-2109449 MSD calculation for band n5 with 20 MHz UL BW**

*Type: discussion For: Approval  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2111532 n5 25MHz REFSENS**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

**Topic #5: Band n3 50MHz CBW**

**R4-2110073 Further discussion on RefSens for Band n3 50MHz CBW**

*Type: other For: Approval  
 Source: China Telecom, China Unicom*

**Decision:** The document was **not treated**.

**R4-2110074 Draft CR to 38.101-1 Introduce 50MHz CBW for Band n3**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom, China Unicom*

**Decision:** The document was **not treated**.

**R4-2110075 Draft CR to 38.104 Introduce 50MHz CBW for Band n3**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom, China Unicom*

**Decision:** The document was **not treated**.

**R4-2111528 n3 50MHz REFSENS**

*Type: discussion For: Approval  
 38.101 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

##### 8.27.2.2 MPR/A-MPR/NS signaling

##### 8.27.2.3 others

R4-2109867 is moved from AI 8.27 to AI 8.27.2.3

**R4-2109867 Introducing NR-U 100 MHz carrier bandwidth in bands n46 and n96**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

Chair: this Tdoc won’t be treated since it is not included in NR\_bands\_R17\_Bws.

**Decision:** The document was **not treated**.

#### 8.27.3 BS RF requirements

**Topic #2: Band n40 90 and 100MHz CBW**

**R4-2110650 Draft CR to 38.104: Adding 90 MHz for band n40**

*Type: draftCR For: Endorsement  
 38.104 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon, CMCC*

**Decision:** The document was **not treated**.

### 8.28 Introduction of channel bandwidths 35MHz and 45MHz for NR

#### 8.28.1 General and Rapporteur Input (WID/TR/CR)

**Email discussion summary of [99-e][121] NR\_FR1\_35MHz\_45MHz\_BW, AI 8.28.2 & AI 8.28.3 – Liehai Liu**

**R4-2107647 Email discussion summary for [99-e][121]** **NR\_FR1\_35MHz\_45MHz\_BW**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210722. Completion date is June 2021 for Core and Perf.

Remaining issues

* *UE Band specific requirements.*

**Conclusions**

#### 8.28.2 UE RF requirements

**Topic #1: UE RF requirements**

**UE REFSENS**

**R4-2110657 On asymmetric Uplink /Downlink scenarios**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111471 35MHz and 45MHz REFSENS**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111530 Remaining n8 n71 Asymmetric Uplink Downlink Requirements**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

**UE REFSENS table split and simplification**

R4-2109418 and R4-2109419 are moved from AI 8.27.2 to AI 8.28.2

**R4-2109418 A unified equation for specifying REFSENS for both TDD and FDD bands**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2111538 FR1 FDD SDL REFSENS Table Simplification**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Decision:** The document was **not treated**.

LS

**R4-2111149 REFSENS table structure, band groups**

*Type: LS out For: Approval  
 to TSG RAN5  
 Source: Ericsson*

**Abstract:**

LS out to RAN5 to seek their input on restructuring of REFSENS tables in 38.101-x

**Decision:** The document was **not treated**.

CR/Draft CR

**R4-2109419 Draft CR for specifying REFSENS based on a unified equation method**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2110160 CR for TS 38.101-1: FR1 REFSENS table split and simplication**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0812 rev Cat: F (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2111150 Draft CR to add 35 and 45MHz BW to TS38.101-1**

*Type: draftCR For: Agreement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Draft CR to add 35 and 45MHz BW to TS38.101-1

**Decision:** The document was **withdrawn**.

#### 8.28.3 BS RF requirements

**Topic #2: BS CRs**

**R4-2110485 CR to TS 37.105: Intoduction of 35 MHz and 45 MHz**

*Type: CR For: Agreement  
 37.105 v17.1.0 CR-0235 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

BS RF requirements for 35 MHz and 45 MHz channel bandwidths were added. Technically endorsed CR: R4-2103193

**Decision:** The document was **not treated**.

**R4-2110486 CR to TS 38.141-1: Introduction of CBWs 35 MHz and 45 MHz**

*Type: CR For: Agreement  
 38.141-1 v17.1.0 CR-0225 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

BS RF requirements which are bandwidth specific require updating to include 35 MHz and 45 MHz bandwidths. Technically endorsed CR: R4-2103194

**Decision:** The document was **not treated**.

**R4-2110598 CR to TS 38.141-2: Introduction of 35MHz and 45MHz**

*Type: CR For: Agreement  
 38.141-2 v17.1.0 CR-0340 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110599 CR to TS 37.145-1: introduction of 35MHz and 45MHz**

*Type: CR For: Agreement  
 37.145-1 v17.1.0 CR-0262 rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110659 CR for TS 37.141: introduction of channel bandwidths 35MHz and 45MHz**

*Type: CR For: Agreement  
 37.141 v17.1.0 CR-0981 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110660 CR for TS 37.145-2: introduction of channel bandwidths 35MHz and 45MHz**

*Type: CR For: Agreement  
 37.145-2 v17.1.0 CR-0305 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110747 CR for TS 38.104: introduction of channel bandwidths 35MHz and 45MHz**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0332 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111222 CR to 37.104: Introduction of requirements for 35 and 45MHz channel bandwidths**

*Type: CR For: Agreement  
 37.104 v17.1.0 CR-0948 rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 8.28.4 RRM requirements

#### 8.28.5 UE demodulation and CSI requirements

### 8.29 Introduction of bandwidth combination set 4 (BCS4) for NR

**Email discussion summary of [99-e][122] NR\_BCS4, AI 8.29 – Per Lindell**

**R4-2107648 Email discussion summary for [99-e][122]** **NR\_BCS4**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-202832. Completion date is March 2022 for Core.

*Way forward R4-2103271 was agreed, and which are stating:*

* ***To be further discussed if BCS4 applies for all combinations***
* ***To be further discussed on how to apply BCS4 in configuration tables***
* ***MSD*** *due to UL harmonics agreed and draft CR R4-2103394 was endorsed, but remaining MSD remains to be discussed*
* *To be further discussed on if and how* ***signaling*** *shall apply*

**Conclusions**

#### 8.29.1 General and Rapporteur Input (WID/TR/CR)

**Topic #1: General part—signalling, BSC4 mandatory, How to indicate BCS4**

R4-2110181 is moved from AI 8.29.3 to AI 8.29.1

**R4-2110181 The signalling for BCS4**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110407 General discussion on introduction of BCS4**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

R4-2110408 is moved from AI 8.29.3 to AI 8.29.1

**R4-2110408 Discussion on UE capability for BCS4**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

R4-2110432 is moved from AI 8.29.2.2 to AI 8.29.1

**R4-2110432 Discussion on BCS4**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110797 BCS4 discussion**

*Type: discussion For: (not specified)  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111482 Proposals for BCS4 Open Issues**

*Type: discussion For: Approval  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

#### 8.29.2 UE RF requirements

##### 8.29.2.1 MSD

**Topic #2: MSD**

**R4-2110405 Discussion on how to simplify MSD due to harmonic interference using bandwidth-agnostic approach**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

R4-2110406 is moved from AI 8.29.2.2 to AI 8.29.2.1

**R4-2110406 Discussion on MSD due to cross band isolation and counter intermodulations**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111479 BCS4 Equation based MSD**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

Chair: This Tdoc is not available.

**Decision:** The document was **not treated**.

##### 8.29.2.2 Others (in case MPR/A-MPR is needed)

#### 8.29.3 Signalling

### 8.30 Addition of MSD (Maximum Sensitivity Degradation) for inter-band EN-DC combinations (1 band LTE+1 band NR FR1) due to added channel bandwidths

**Email discussion summary of [99-e][123] NR\_MSD\_Inter\_Band\_ENDC, AI 8.30 – Peng Zhang**

**R4-2107649 Email discussion summary for [99-e][123] NR\_MSD\_Inter\_Band\_ENDC**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210891. Completion date is March 2022 for Core.

**Conclusions**

#### 8.30.1 General and Rapporteur Input (WID/TR/CR)

#### 8.30.2 UE RF requirements

**Topic #1: missing MSD requirements**

**R4-2110429 CR for 38.101-3 to introduce the missing MSD requirements (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0570 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110430 CR for 38.101-3 to introduce the missing MSD requirements (Rel-17)**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0571 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 8.30.3 Others

### 8.31 High-power UE operation for use cases in Band n77 and n78

**Email discussion summary of [99-e][124] HPUE\_PC1\_5\_n77\_n78\_n79, AI 8.31 & AI 8.32 – Gene Fong**

**R4-2107650 Email discussion summary for [99-e][124]** **HPUE\_PC1\_5\_n77\_n78\_n79**

*Type: Other For: Information  
 Source: Moderator (Qulacomm)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-202912 for High-power UE (PC1.5) operation in NR bands n77 and n78. The completion date is June 2021 for Core.

Remaining open issues:

* *UE RF requirements still need to be completed, including possibly MPR for FWA devices.*
* *RF exposure for FWA still requires further study.*

Refer to WID RP-210843 for High power UE (power class 1.5) for NR band n79. The completion date is Sep. 2021.

**Conclusions**

#### 8.31.1 General

#### 8.31.2 PC1.5 UE RF requirements

**Topic #1 MPR for smartphone**

R4-2109441 is moved from AI 8.31.2.2 to AI 8.31.2

**R4-2109441 Considerations on n77 and n78**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

R4-2110985 is moved from AI 8.31.2.1 to AI 8.31.2

**R4-2110985 A reconsideration of PC1.5 MPR for smartphones**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111009 Evaluation of Reverse IMD versus antenna isolation and its impact to MPR**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we do not provide MPR data as the time was too short between the two meetings to perform these types of cumbersome measurements, but nevertheless we have performed some experiments to provide further insights on the effect of reverse

**Decision:** The document was **not treated**.

##### 8.31.2.1 A-MPR

##### 8.31.2.2 others

**Topic #2 MPR for FWA**

**R4-2111297 Discussion on MPR requirements for PC1.5 FWA**

*Type: discussion For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110832 R17 PC1.5 FWA**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**Topic #3 SAR and MPE**

**R4-2109843 MPE handling for high power FWA UE in FR1**

*Type: discussion For: (not specified)  
 Source: Samsung*

**Decision:** The document was **not treated**.

### 8.32 High power UE (power class 1.5) for NR band n79

**Refer to Email discussion summary of [99-e][124] HPUE\_PC1\_5\_n77\_n78\_n79, AI 8.31 & AI 8.32 – Gene Fong**

#### 8.32.1 General

**Topic #3 SAR and MPE**

**R4-2108940 CR on PC1.5 HPUE SAR issue into Rel-16 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0744 rev Cat: F (Rel-16)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2108941 CR on PC1.5 HPUE SAR issue into Rel-17 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0745 rev Cat: A (Rel-17)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

#### 8.32.2 PC1.5 UE RF requirements

**Topic #1 MPR for smartphone & FWA**

**R4-2108974 Discussion on the UE RF requirements of PC1.5 n79**

*Type: discussion For: Approval  
 Source: CMCC*

**Decision:** The document was **not treated**.

**CR**

**R4-2108942 CR on PC1.5 UE RF requirements of n79 in Rel-17 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0746 rev Cat: B (Rel-17)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

##### 8.32.2.1 A-MPR

##### 8.32.2.2 others

### 8.33 High power UE (power class 2) for NR band n34

**Email discussion summary of [99-e][125] HPUE\_PC2\_n34\_n39, AI 8.33 and AI 8.34 – Zhe Shao**

**R4-2107651 Email discussion summary for [99-e][125]** **HPUE\_PC2\_n34\_n39**

*Type: Other For: Information  
 Source: Moderator (CMCC)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210844 for High power UE (power class 2) for NR band n34. The completion date is Sep. 2021.

Refer to WID RP-210845 for High power UE (power class 2) for NR band n39. The completion date is Sep. 2021.

**Conclusions**

#### 8.33.1 General

#### 8.33.2 UE RF requirements

**Topic #1: Introduction of PC2 n34 for NR**

**MOP and Tx power tolerance**

**R4-2108975 Discussion on the UE RF requirements of PC2 n34**

*Type: discussion For: Approval  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2109003 PC2 MOP lower tolerance for n34/n39**

*Type: other For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109677 Discussion on Tx power tolerance for n34**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110474 Discussion on HPUE band n34**

*Type: other For: (not specified)  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2109438 Considerations for PC2 n39 and A-MPR results**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **withdrawn**.

**CR**

**R4-2108943 CR on PC2 UE RF requirements of n34 in Rel-17 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0747 rev Cat: B (Rel-17)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

#### 8.33.3 Others

### 8.34 High power UE (power class 2) for NR band n39

#### 8.34.1 General

#### 8.34.2 UE RF requirements

**Topic #2: Introduction of PC2 n39 for NR**

**MOP & Tx power tolerance, A-MPR, MPR**

**R4-2108976 Discussion on the UE RF requirements of PC2 n39**

*Type: discussion For: Approval  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2109257 PC2 A-MPR simulation results for NS\_50 on n39**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109259 PC2 A-MPR for NS\_50 on n39**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110475 Discussion on HPUE band n39**

*Type: other For: (not specified)  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111014 Considerations for PC2 n39 and A-MPR results**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**CR**

**R4-2108944 CR on PC2 UE RF requirements of n39 in Rel-17 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0748 rev Cat: B (Rel-17)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

#### 8.34.3 Others

### 8.35 SAR schemes for UE power class 2 (PC2) for NR inter-band Carrier Aggregation and supplemental uplink (SUL) configurations with 2 bands UL

**Email discussion summary of [99-e][126] NR\_SAR\_PC2\_interB\_SUL\_2BUL, AI 8.35 – Bo Liu**

**R4-2107652 Email discussion summary for [99-e][126]** **NR\_SAR\_PC2\_interB\_SUL\_2BUL**

*Type: Other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-201584. Completion date is Sep 2021 for Core.

Remaining issues

* *Network centralized SAR solutions for PC2 NR inter-band CA and SUL configurations*

**Conclusions**

#### 8.35.1 General and Rapporteur Input (WID/TR/CR)

#### 8.35.2 PC2 requirements for inter-band CA

**Topic #1: PC2 SAR solutions**

**Dutycycle solution for CA and SUL**

**R4-2108805 On UL Duty Cycle method for NR uplink inter band CA**

*Type: other For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution focuses on discussing Duty Cycle based solutions, specifically on how to handle SARratioNR.

**Decision:** The document was **not treated**.

**R4-2109676 Discussion on SAR ratio in duty cycle solution**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110049 Further discussion on SAR schemes for UE power class 2 NR inter-band CA with 2UL**

*Type: other For: Approval  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2110192 Discussion on SAR issue for HP UE inter-band UL CA**

*Type: other For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110438 Further discussion on SAR solution for NR PC2 inter-band CA**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110830 R17 Inter band CA HPUE SAR**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

R4-2110831 is moved from AI 8.35.4 to AI 8.35.2

**R4-2110831 R17 power class report for NR in CA**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**Blind scheme solution**

**R4-2109975 More on methods for faciliating SAR compliance for inter-band UL CA**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we reiterate the proposal that duty-cycle reporting should not be specified, it is not viable. Power limits combined with the P-MPR method should be used instead.

**Decision:** The document was **not treated**.

**R4-2110201 Discussion on increasing UE maximum power high limit**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **withdrawn**.

#### 8.35.3 PC2 requirements for SUL

**R4-2110050 Further discussion on SAR schemes for UE power class 2 NR SUL configurations**

*Type: other For: Approval  
 Source: China Telecom*

**Decision:** The document was **not treated**.

#### 8.35.4 Others

**Topic #2: Increasing UE maximum power high limit**

**R4-2108806 On increasing UE maximum power high limit for NR uplink inter band CA**

*Type: other For: Approval  
 38.101 v CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on how to fully take advantage of the hardware capability already present in the UE and ways to lift the restriction on maximum output power imposed by the power class for uplink inter-band CA.

**Decision:** The document was **not treated**.

R4-2109173 is moved from AI 8.35.2 to AI 8.35.4

**R4-2109173 Discussion on increasing maximum output power for UE PC2 CA**

*Type: discussion For: Approval  
 Source: Mediatek India Technology Pvt.*

**Decision:** The document was **not treated**.

**R4-2109976 Higher BC power class for UL CA**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose that a power capability of a band combination higher than 26 dBm is specified as a new power class.

**Decision:** The document was **not treated**.

**R4-2111298 Discussion on New Power Limits for Inter-band CA or DC**

*Type: discussion For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

R4-2111501 is moved from AI 8.35.2 to AI 8.35.4

**R4-2111501 Power class consideration for NR inter-band UL CA**

*Type: other For: Approval  
 Source: Apple*

**Decision:** The document was **not treated**.

### 8.36 High power UE (power class 2) for NR inter-band Carrier Aggregation with 2 bands downlink and 2 bands uplink

**Email discussion summary of [99-e][127] NR\_PC2\_CA\_R17\_2BDL\_2BUL, AI 8.36 – Bo Liu**

**R4-2107653 Email discussion summary for [99-e][127]** **NR\_PC2\_CA\_R17\_2BDL\_2BUL**

*Type: Other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210476. Completion date is March 2021 for Core.

**Conclusions**

#### 8.36.1 Rapporteur Input (WID/TR/CR)

**Topic #1: draft TR and big CR**

**R4-2110051 Draft TR 38.841 v0.4.0: High power UE for NR inter-band Carrier Aggregation with 2 bands downlink and x bands uplink (x =1,2)**

*Type: draft TR For: Agreement  
 38.841 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2110052 CR to 38.101-1 Introduce RF requirements for HPUE CA with 2 bands downlink and x bands uplink (x =1,2)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0805 rev Cat: B (Rel-17)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

#### 8.36.2 UE RF requirements

**Topic #2: UE RF requirements**

**R4-2110790 Discussion on how to reflect HPUE CA with 1 up link in 38101**

*Type: other For: Approval  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2110791 Discussion on UE capability for improved PC2 MSD for EN-DC and NR CA**

*Type: discussion For: (not specified)  
 Source: CHTTL*

**Decision:** The document was **not treated**.

**R4-2110786 Discussion on how to reflect HPUE CA with 1 up link in 38101**

*Type: other For: Approval  
 Source: China Telecom*

**Decision:** The document was **withdrawn**

**R4-2110787 Discussion on how to reflect HPUE CA with 1 up link in 38101**

*Type: other For: Approval  
 Source: China Telecom*

**Decision:** The document was **withdrawn**.

**TP**

**R4-2110070 TP to 38.841: MSD requirement due to harmonic mixing for PC2 CA\_n3A-n78A with up to 2 uplink**

*Type: pCR For: Approval  
 38.841 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2110460 TP for TR38.841\_ PC2 CA\_n41A-n79A**

*Type: pCR For: Approval  
 38.841 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111490 TP for TR38.841: PC2 CA\_n41A-n77A**

*Type: pCR For: Approval  
 38.841 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111491 TP for TR38.841: PC2 CA\_n71A-n77A**

*Type: pCR For: Approval  
 38.841 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2111489 TP for TR38.841: PC2 CA\_n25A-n77A**

*Type: pCR For: Approval  
 38.841 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: T-Mobile USA*

**Decision:** The document was **not treated**.

### 8.37 High power UE (power class 2) for EN-DC with 1 LTE band + 1 NR TDD band

**Email discussion summary of [99-e][128] ENDC\_UE\_PC2\_R17\_NR\_TDD, AI 8.37 –Basaier Jialade**

**R4-2107654 Email discussion summary for [99-e][128]** **ENDC\_UE\_PC2\_R17\_NR\_TDD**

*Type: Other For: Information  
 Source: Moderator (China Unicom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210327. The completion date is March 2022.

**Conclusions:**

#### 8.37.1 Rapporteur Input (WID/TR/CR)

**Topic #2: TR and revised WID review**

**R4-2108865 TR 37.826 v0.4.0 ENDC\_UE\_PC2\_R17\_NR\_TDD**

*Type: draft TR For: Approval  
 37.826 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: China Unicom*

**Decision:** The document was **not treated**.

**R4-2108937 Big CR on introduction of completed PC2 for EN-DC with 1 LTE band + 1 NR TDD band**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0522 rev Cat: B (Rel-17)  
  
 Source: China Unicom*

**Decision:** The document was **not treated**.

**R4-2108938 Revised WID on High power UE (power class 2) for EN-DC with 1 LTE band + 1 NR TDD band**

*Type: WID revised For: Approval  
 Source: China Unicom*

**Decision:** The document was **not treated**.

#### 8.37.2 UE RF requirements

**Topic #1: PC2 MSD for DC\_3A\_n78A**

**R4-2111425 PC2 MSD for DC\_3A\_n78A**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

### 8.38 Power Class 2 UE for NR inter-band CA and SUL configurations with x (x>2) bands DL and y (y=1, 2) bands UL

**Email discussion summary of [99-e][129] NR\_UE\_PC2\_CA\_SUL\_xBDL\_yBUL, AI 8.38 – Jin Wang**

**R4-2107655 Email discussion summary for [99-e][129]** **NR\_UE\_PC2\_CA\_SUL\_xBDL\_yBUL**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210543. The completion date is March 2022.

**Conclusions**

#### 8.38.1 Rapporteur Input (WID/TR/CR)

**Topic #1: Rapporteur input**

**R4-2111422 draft TR 38.842 v0.0.2**

*Type: draft TR For: Approval  
 38.842 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111292 Revised WID on NR\_UE\_PC2\_R17\_CADC\_SUL\_xBDL\_yBUL**

*Type: WID revised For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.38.2 UE RF requirements

**Topic #2: TP of BCS for PC2 CA**

**R4-2111420 TP for 38.842 for CA\_n1-n3-n78**

*Type: pCR For: Approval  
 38.842 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

### 8.39 Power Class 2 for EN-DC with xLTE band + yNR DL with 1LTE+1(TDD) NR UL band (x= 2, 3, 4, y=1; x=1, 2, y=2)

**Email discussion summary of [99-e][130] ENDC\_PC2\_R17\_xLTE\_yNR, AI 8.39 – Per Lindell**

**R4-2107656 Email discussion summary for [99-e][130]** **ENDC\_PC2\_R17\_xLTE\_yNR**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information**

Refer to WID RP-210816. The completion date is September 2021.

**Conclusions**

#### 8.39.1 Rapporteur Input (WID/TR/CR)

**Topic #2: Notification in TS on completed PC2 combinations**

R4-2108804 is moved from AI 8.39 to AI 8.39.1

**R4-2108804 Handling of PC2 uplink configurations with more than 2 DL bands**

*Type: other For: Approval  
 38.101-3 v CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell, CHTTL, Verizon*

**Abstract:**

Discussion on how to clarify which PC2 configurations with more than two DL bands are completed or not.

**Decision:** The document was **not treated**.

**TR and revised WID**

**R4-2111072 Revised WID EN-DC PC2**

*Type: WID revised For: Endorsement  
 Source: Ericsson*

**Abstract:**

Revised WID EN-DC PC2

**Decision:** The document was **not treated**.

**R4-2111078 CR 38.101-3 EN-DC PC2**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0590 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-3 EN-DC PC2

**Decision:** The document was **not treated**.

**R4-2111082 TR 37.827 v0.1.0 ENDC\_PC2\_R17\_xLTE\_yNR**

*Type: draft TR For: Endorsement  
 37.827 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

TR 37.827 v0.1.0 ENDC\_PC2\_R17\_xLTE\_yNR

**Decision:** The document was **not treated**.

#### 8.39.2 UE RF requirements

**Topic #1: General TPs for band combiantions**

**R4-2108901 TP for TR 37.827 for DC\_2-13\_n66-n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108902 TP for TR 37.827 for DC\_2-13-66\_n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108903 TP for TR 37.827 for DC\_13-66\_n2-n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108904 TP for TR 37.827 for DC\_2-66\_n5-n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108905 TP for TR 37.827 for DC\_2-5-66\_n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108906 TP for TR 37.827 for DC\_13\_n66-n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2108907 TP for TR 37.827 for DC\_13\_n2-n77**

*Type: discussion For: Approval  
 Source: Verizon Denmark*

**Decision:** The document was **not treated**.

**R4-2110745 TP for PC2 DC\_2\_66-n41**

*Type: discussion For: (not specified)  
 Source: Huawei Tech.(UK) Co.. Ltd*

**Abstract:**

Text proposal for PC2 DC\_2\_66-n41

**Decision:** The document was **withdrawn**.

**R4-2110957 TP for PC2 DC\_2\_66-n41**

*Type: discussion For: (not specified)  
 Source: Huawei Tech.(UK) Co.. Ltd*

**Abstract:**

Text proposal for PC2 DC\_2\_66-n41

**Decision:** The document was **not treated**.

### 8.40 High power UE for NR TDD intra-band carrier aggregation in frequency range FR1

#### 8.40.1 General and Rapporteur Input (WID/TR/CR)

#### 8.40.2 PC2 UE RF requirements

##### 8.40.2.1 Maximum output power

##### 8.40.2.2 A-MPR

##### 8.40.2.3 others

### 8.41 Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n259

**Email discussion summary of [99-e][132] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258, AI 8.41, AI 7.1.1 – Sumant Iyer**

**R4-2107657 Email discussion summary for [99-e][132]** **NR\_NewRAT\_SysParameters**

*Type: Other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210875. The completion date is September 2021.

**Conclusions:**

#### 8.41.1 UE RF requirements

**R4-2108814 PC5 RF requirements in n259**

*Type: other For: Agreement  
 Source: Qualcomm Incorporated*

**Abstract:**

PC5 n259 proposals for RF requirements

**Decision:** The document was **not treated**.

**R4-2109006 Views on RF requirement for FWA**

*Type: other For: Approval  
 Source: Sony, Ericsson*

**Decision:** The document was **not treated**.

**R4-2109147 On new FWA UE RF requirement**

*Type: discussion For: Approval  
 Source: Murata Manufacturing Co Ltd.*

**Decision:** The document was **not treated**.

**R4-2109543 Proposal on n259 PC5 Tx and Rx requirements**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2110019 FR2 PC5 requirements for n259**

*Type: discussion For: (not specified)  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2110836 R17 n259 FWA**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111062 RF requirements of power class 5 for band n259**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2109505 Proposal on n259 PC5 Tx and Rx requirements**

*Type: discussion For: (not specified)  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **withdrawn**.

#### 8.41.2 RRM performance requirements

#### 8.41.3 Others

### 8.42 Additional NR bands for UL-MIMO

**Email discussion summary of [99-e][131]** **NR\_intra\_HPUE\_UL\_MIMO\_bands, AI 8.40, AI 8.42 – Qian Zhang**

**R4-2107658 Email discussion summary for [99-e][131]** **NR\_intra\_HPUE\_UL\_MIMO\_bands**

*Type: Other For: Information  
 Source: Moderator (Huawei, HiSilicon)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210555 for HPUE for NR TDD intra-band CA. The completion date is March 2022.

Refer to WID RP-210557 for Additional NR bands for UL-MIMO power class 3 (PC3). The completion date is March 2022.

**Conclusions:**

#### 8.42.1 General and Rapporteur Input (WID/TR/CR)

**Topic #1: New NR bands for UL-MIMO**

**R4-2111445 revised WID on Additional NR bands for UL-MIMO in Rel-17**

*Type: WID revised For: Endorsement  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.42.2 MPR/A-MPR requirements

**R4-2111444 On requirements for n40 supporting PC2 UL MIMO**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.42.3 Others

### 8.43 Downlink interruption for band combinations to conduct dynamic Tx Switching

**Email discussion summary of [99-e][133]** **DL\_intrpt\_combos\_TxSW\_R17, AI 8.43 – Bo Liu**

**R4-2107659 Email discussion summary for [99-e][133]** **DL\_intrpt\_combos\_TxSW\_R17**

*Type: Other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Informations:**

Refer to WID RP-210478. The completion date is March 2022.

**Conclusions:**

#### 8.43.1 General and Rapporteur Input (WID/TR/CR)

**R4-2109031 TR 37.867 v0.3.0**

*Type: draft TR For: Approval  
 37.867 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2110071 CR to 38.101-1 Introduce DL interruption clarification for CA conduting Tx Switching**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0806 rev Cat: B (Rel-17)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

#### 8.43.2 Determination of inter-band uplink CA and EN-DC combinations for which DL interruption is not allowed

**R4-2109578 DL interruption for TX switching discussion**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: MediaTek Inc.*

**Decision:** The document was **not treated**.

**R4-2110072 TP to 37.867 DL interruption clarification for CA\_n1-n3-n78 to conduct Tx switching**

*Type: pCR For: Approval  
 37.867 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom*

**Decision:** The document was **not treated**.

#### 8.43.3 Others

### 8.44 Simultaneous Rx/Tx band combinations for CA, SUL, MR-DC and NR-DC

**Email discussion summary of [99-e][134]** **Simultaneous\_RxTx, AI 8.44 AI 13.2 selected Tdocs –Ye(Leo) Liu**

**R4-2107660 Email discussion summary for [99-e][134]** **Simultaneous\_RxTx**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

Refer to WID RP-210890. The completion date is March 2022.

**Conclusions**

#### 8.44.1 General and Rapporteur Input (WID/TR/CR)

**R4-2111447 Revised WID on simultaneous Rx/Tx**

*Type: WID revised For: Endorsement  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.44.2 Criteria and analysis of Sim.RX/TX

**Topic #1: Issues related to PC2 HPUE for SL enhancement**

**R4-2109686 Discussion on criteria of Simultaneous RxTx**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110200 Discussion on principle for simultaneous Rx Tx band combinations for CA, SUL, MR-DC and NR-DC**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110478 Further discussion on Simultaneous RxTx**

*Type: other For: (not specified)  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110776 Further discussion on general principle for simultaneous Rx/Tx band combinations**

*Type: discussion For: Discussion  
 Source: CHTTL*

**Decision:** The document was **not treated**.

**R4-2110835 R17 simultaneous RxTx**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

R4-2111448 is moved from AI 8.44.3 to AI 8.44.2.

**R4-2111448 On principles for deciding simultaneous RxTx capability**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110467 Further discussion on Simultaneous RxTx**

*Type: other For: (not specified)  
 Source: ZTE Corporation*

**Decision:** The document was **Withdrawn**.

#### 8.44.3 Others

**Topic #2: Reply LS to RAN2 on simulatenous Rx/Tx**

**R4-2111452 draft Reply LS on simultaneous RxTx capability**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109506 Discussion on the UE capability of simultaneous RxTx with partially applicable band pairs**

*Type: discussion For: (not specified)  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

## 9 Rel-17 non-spectrum related work items for NR

### 9.1 Multiple Input Multiple Output (MIMO) Over-the-Air (OTA) requirements for NR UEs

#### 9.1.1 General

#### 9.1.2 Performance requirements

##### 9.1.2.1 Performance Requirements for FR1

##### 9.1.2.2 Performance Requirements for FR2

#### 9.1.3 Testing methodologies

##### 9.1.3.1 Testing parameters for Performance

##### 9.1.3.2 Optimization of test methodologies

##### 9.1.3.3 Channel model validation

### 9.2 Introduction of UE TRP (Total Radiated Power) and TRS (Total Radiated Sensitivity) requirements and test methodologies for FR1 (NR SA and EN-DC)

#### 9.2.1 General and work plan

#### 9.2.2 SA test methodology

#### 9.2.3 EN-DC test methodology

### 9.3 RF requirements enhancement for NR frequency range 1 (FR1)

#### 9.3.1 General

#### 9.3.2 RF core requirements

##### 9.3.2.1 UL MIMO configuration for SUL band configurations

##### 9.3.2.2 2Tx switching between carrier 1 and carrier 2

**Email discussion summary of [99-e][136] NR\_RF\_FR1\_enh\_Part\_2, AI 9.3.2.2, AI 9.3.2.3 – Shan Yang**

**R4-2107662 Email discussion summary for [99-e][136]** **NR\_RF\_FR1\_enh\_Part\_2**

*Type: Other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109422 Further discussion on UL Tx switching between 2 uplink carriers in Rel-17**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109424 DraftCR on Rel-17 UL Tx switching time mask for 2Tx-2Tx switching between two carriers**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109586 Discussion on 2Tx-2Tx switching time and draft reply LS**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2111451 draft reply LS on Rel-17 uplink Tx switching**

*Type: LS out For: Approval  
 to RAN1, cc RAN2  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

##### 9.3.2.3 Tx switching between 1 carrier on band A and 2 contiguous aggregated carriers on band B

**R4-2109421 Draft CR to 38.101-1 Correction on DL interruption applicability for inter-band CA**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109423 Further discussion on UL Tx switching between 2 uplink bands in Rel-17**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109477 Correction on DL interruption applicability for inter-band CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0780 rev Cat: F (Rel-17)  
  
 Source: CMCC*

**Decision:** The document was **not treated**.

##### 9.3.2.4 HPUE for TDD intra-band contiguous UL CA

**Email discussion summary of [99-e][135] NR\_RF\_FR1\_enh\_Part\_1, AI 9.3.2.4, AI 9.3.2.5, AI 9.3.2.6 – Qian Zhang**

**R4-2107661 Email discussion summary for [99-e][135]** **NR\_RF\_FR1\_enh\_Part\_1**

*Type: Other For: Information  
 Source: Moderator (Huawei, HiSilicon)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109979 Power reduction for contigous (and non-contiguous) UL CA with HPUE: MPR and power prioritization**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we discuss the MPR for intra-band non-contigous UL CA, the impact om PHR and the power prioritization when the UE is power limited.

**Decision:** The document was **not treated**.

**R4-2111351 CR for PC2 intra-band UL contiguous CA requirement**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0850 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

##### 9.3.2.5 HPUE for TDD intra-band non-contiguous UL CA

**R4-2108799 26+23 dBm w 2Los and 1LO architecture considerations**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109260 PC2 1PA Intra-band UL NC CA MPR Simulations**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109261 PC2 1PA Intra-band UL NC CA MPR**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109965 MPR simulation results for NR intra-band non-contiguous CA according to candidate RF architectures**

*Type: other For: Approval  
 Source: LG Electronics France*

**Abstract:**

provide MPR results for NR PC2 intra-band NC-CA UE

**Decision:** The document was **not treated**.

**R4-2110820 R17 FR1 UL NC CA**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111384 on intra-band UL NC CA architecture and MPR**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111480 Input on exceptions for non-baseline PC2 NC UL CA architectures**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we further discuss from our last meeting paper how to dimension the exceptions needed to enable the non-baseline architectures in order to make them valuable options for the specification.

**Decision:** The document was **not treated**.

##### 9.3.2.6 Intra-band UL contiguous CA for UL MIMO (n41C and n78C)

**R4-2109425 Discussion on intra-band UL contiguous CA for UL MIMO**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109680 Further discussion for Intra-band UL contiguous CA for UL-MIMO**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110819 R17 FR1 UL CA with MIMO and draft LS**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111023 PC2 contiguous UL CA using transparent Tx Diversity or UL MIMO**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we discuss the status of the TxDiv and UL MIMO MPR for single CC and its impact to the PC2 contiguous UL CA MPR work and suggest that separate MPR requirement is set for this two cases from the already agreed baseline architecture MP

**Decision:** The document was **not treated**.

**R4-2111380 draft CR on contiguous CA with UL MIMO for power class 3**

*Type: draftCR For: Approval  
 38.101-1 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 9.3.3 RRM core requirements

### 9.4 NR RF requirement enhancements for frequency range 2 (FR2)

#### 9.4.1 General

**Email discussion summary of [99-e][137] NR\_RF\_FR2\_req\_enh2\_Part\_1, AI 9.4.1, AI 9.4.2, AI 9.4.3 – Petri Vasenkari**

**R4-2107663 Email discussion summary for [99-e][137]** **NR\_RF\_FR2\_req\_enh2\_Part\_1**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2108912 TR 38.851-010**

*Type: draft TR For: Approval  
 38.851 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109980 On MRTD and CBM capability for inter-band DL CA**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we ask if the MRTD is important for the BM and a possible relation to a frequency-separation capability

**Decision:** The document was **not treated**.

**R4-2110667 CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#99-e and RAN4#98-bis-e into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0581 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 9.4.2 RF core requirements

**R4-2109889 Discussion on RX beam switch delay for FR2 inter-band DL CA**

*Type: discussion For: Approval  
 Source: NEC*

**Abstract:**

We provide our views on RX beam switch delay for FR2 inter-band CA

**Decision:** The document was **not treated**.

##### 9.4.2.1 Inter-band DL CA enhancements

**R4-2109450 Inter-band DL CA for FR2**

*Type: discussion For: Approval  
 Source: Apple*

**Decision:** The document was **not treated**.

###### 9.4.2.1.1 Applicability of CBM/IBM for different CA configurations

**R4-2108914 TP to TR 38.851 Applicability of CBM IBM for different CA configurations**

*Type: pCR For: Approval  
 38.851 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109539 Discussion on UE capability supporting both IBM and CBM**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2110182 UE capability of IBM and CBM**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110435 Further discussion on CBM&IBM for FR2 Inter-band DL CA**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

###### 9.4.2.1.2 UE requirements for CA configurations CA\_n258A-n260A and CA\_n257A-n259A based on IBM

**R4-2108910 CR to 38.307 to add interband CA R16 CATF**

*Type: CR For: Agreement  
 38.307 v16.6.0 CR-0061 rev Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, NTT DOCOMO*

**Decision:** The document was **not treated**.

**R4-2108911 CR to 38.307 to add interband CA R17 CATA**

*Type: CR For: Agreement  
 38.307 v17.1.0 CR-0062 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell, NTT DOCOMO*

**Decision:** The document was **not treated**.

**R4-2109183 Relaxation values of spherical coverage requirement for n257-n259**

*Type: other For: Approval  
 Source: NTT DOCOMO INC., Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109184 CR to TS38.101-2[R17]: Addition of requirements for n257+n259 and n258+n260**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0367 rev Cat: B (Rel-17)  
  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **withdrawn**.

**R4-2109787 Introduction of FR2 DL CA\_n257+n259 and CA\_n258-n260**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0371 rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell, NTT DOCOMO, INC.*

**Abstract:**

FR2 DLCA based on IBM CA\_n257+n259 and CA\_n258-n260 are introduced

**Decision:** The document was **not treated**.

**R4-2110822 R17 FR2 Inter-band DL CA with IBM**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111370 On Rel-17 inter band DL CA with IBM \_FR2**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

###### 9.4.2.1.3 UE requirements for CA configurations within the same frequency group based on CBM

**R4-2108812 Requirement framework for Inter-band CA with CBM**

*Type: other For: Agreement  
 Source: Qualcomm Incorporated*

**Abstract:**

Requirement framework which does not preclude any implemention

**Decision:** The document was **not treated**.

**R4-2108913 CA with IBM within same frequency group**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109009 UE requirements for CBM**

*Type: other For: Approval  
 Source: Sony, Ericsson*

**Decision:** The document was **not treated**.

**R4-2109540 Discussion on CBM requirements of inter-band DL CA**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2109558 View on Inter-band DL CA based on CBM within same frequency group**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2109653 Discussion on RF requirements for inter-band DL CA based on CBM**

*Type: discussion For: Discussion  
 Source: LG Electronics Polska*

**Abstract:**

It discusses RF requirements for FR2 inter-band DL CA based on CBM.

**Decision:** The document was **not treated**.

**R4-2109655 Discussion on CBM architecture and requirement**

*Type: discussion For: Decision  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110183 Rx requirements for inter-band DL CA with CBM**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110824 R17 FR2 Inter-band DL CA within same frequency group based on CBM**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111169 Discussion on FR2 inter-band DL CA with CBM**

*Type: discussion For: Approval  
 Source: Google Inc.*

**Decision:** The document was **not treated**.

##### 9.4.2.2 Inter-band UL CA

**R4-2109656 Discussion on FR2 inter-band UL CA**

*Type: discussion For: Decision  
 Source: vivo*

**Decision:** The document was **not treated**.

###### 9.4.2.2.1 UE requirements for CA configuration CA\_n257A-n259A based on IBM

**R4-2109010 UE UL CA requirements based on IBM**

*Type: other For: Approval  
 Source: Sony, Ericsson*

**Decision:** The document was **not treated**.

**R4-2109330 Definition of FR2 EIRP and spherical coverage for ULCA non-overlapping bands n257 and n259**

*Type: discussion For: Approval  
 38.101-2 v CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Provides definition for EIRP and spherical coverage for FR2 ULCA

**Decision:** The document was **not treated**.

**R4-2109559 View on Inter-band UL CA based on IBM within different frequency groups**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2109654 Discussion on RF requirements for inter-band UL CA based on IBM**

*Type: discussion For: (not specified)  
 Source: LG Electronics Polska*

**Abstract:**

It discusses RF requirements for FR2 inter-band UL CA based on IBM.

**Decision:** The document was **not treated**.

**R4-2109788 On FR2 inter-band UL CA for different frequency group based on IBM**

*Type: pCR For: Approval  
 38.851 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

FR2 UL CA is discussed. TP is proposed.

**Decision:** The document was **not treated**.

**R4-2110184 Tx requirements for inter-band UL CA between different frequency groups based on IBM**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110434 Discussion on Max EIRP limit for FR2 ULCA**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110825 R17 FR2 Inter-band UL CA**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

#### 9.4.3 Feasibility study

##### 9.4.3.1 Inter-band DL CA enhancements

**R4-2109701 Discussion on feasibility for inter-band DL CA**

*Type: discussion For: Discussion  
 Source: LG Electronics Polska*

**Abstract:**

It discusses feasibility for inter-band DL CA.

**Decision:** The document was **not treated**.

###### 9.4.3.1.1 Feasibility study for CA configurations within same frequency group based on IBM

**R4-2109560 View on Inter-band DL CA based on IBM within same frequency group**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2110823 R17 FR2 Inter-band DL CA with IBM for same freq group**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

###### 9.4.3.1.2 Feasibility study for CA configurations between different frequency groups based on CBM

**R4-2109576 View on Inter-band DL CA based on CBM within different frequency groups**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Decision:** The document was **not treated**.

**R4-2111371 On Rel-17 inter band DL CA with CBM \_FR2**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 9.4.4 UL gaps for self-calibration and monitoring

**Email discussion summary of [99-e][138] NR\_RF\_FR2\_req\_enh2\_Part\_2, AI 9.4.4 – Yang Tang**

**R4-2107664 Email discussion summary for [99-e][138]** **NR\_RF\_FR2\_req\_enh2\_Part\_2**

*Type: Other For: Information  
 Source: Moderator (Apple)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

##### 9.4.4.1 Gap use cases and performance evaluation

**R4-2109341 UL gaps for Tx power management RF aspect**

*Type: discussion For: Discussion  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109657 Discussion on gap for PMPR calibration**

*Type: discussion For: Decision  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109744 Network impact of UE FR2 UL Gap for UE Tx power enhancement**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109762 Discussion on UL gap for self-calibration and monitoring**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110033 FR2 UL gap for power management (P-MPR) and Tx calibration (peak EIRP)**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**R4-2110826 R17 FR2 UL gap for coherent UL MIMO**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111151 Further consideration on UL calibration gaps**

*Type: discussion For: Decision  
 Source: Ericsson*

**Decision:** The document was **not treated**.

**R4-2111383 On FR2 UL gap for coherence calibration**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109363 UL gaps for Tx power management RRM aspect**

*Type: discussion For: Discussion  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2111260 Discussion on RRM impacts of UL gaps for self-calibration and monitoring**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

##### 9.4.4.2 Others

**R4-2108797 UL Gap testability and configuration aspects**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109745 Requirements and test cases of for P-MPR/EIRP enhancements for UE FR2 UL Gap**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110827 R17 FR2 UL gap for power management**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

#### 9.4.5 Support of contiguous downlink aggregated channel BW up to 1600 MHz

**Email discussion summary of [99-e][139] NR\_RF\_FR2\_req\_enh2\_Part\_3, AI 9.4.5, AI 9.4.6 –Ville Vintola**

**R4-2107665 Email discussion summary for [99-e][139]** **NR\_RF\_FR2\_req\_enh2\_Part\_3**

*Type: Other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

##### 9.4.5.1 New FR2 CA BW classes

**R4-2109528 Considerations on new CA BW class notation**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Abstract:**

In this paper, we’d like to share our views on the denotation to new CA BW classes.

**Decision:** The document was **not treated**.

**R4-2110161 New FR2 CA BW classes**

*Type: other For: Approval  
 38.101-2 v CR- rev Cat: (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110162 CR for TS 38.101-2: Introduction of FR2 new CA BW classes**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0380 rev Cat: B (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110185 Discussion on FR2 new CA BW class denotation and definition**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2111381 on FR2 CA bandwidth class**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

##### 9.4.5.2 UE Rx requirements

#### 9.4.6 DC location reporting scheme for intra-band UL CA with more than 2 CCs for both FR2 and FR1

**R4-2108798 DC location solution RAN4 aspects**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109004 DC location parameters for both FR1 and FR2**

*Type: other For: Approval  
 38.101-2 v CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109658 Discussion on DC location of FR2 intra-band CA**

*Type: discussion For: Decision  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110821 R17 DC reporting for more than 2CCs**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

#### 9.4.7 RRM core requirements

##### 9.4.7.1 Inter-band DL CA enhancements

##### 9.4.7.2 Inter-band UL CA for IBM capable UEs

##### 9.4.7.3 UL gaps for self-calibration and monitoring

### 9.5 NR repeater

#### 9.5.1 General

##### 9.5.1.1 System parameters

##### 9.5.1.2 Repeater Class/Type

##### 9.5.1.3 TDD repeater synchronization assumption

##### 9.5.1.4 Others

#### 9.5.2 Conductive RF core requirements

##### 9.5.2.1 Transmitted power related requirements

##### 9.5.2.2 Emission requirements

##### 9.5.2.3 Others

#### 9.5.3 Radiated RF core requirements

##### 9.5.3.1 Transmitted power related requirements

##### 9.5.3.2 Emission requirements

##### 9.5.3.3 Others

#### 9.5.4 EMC core requirements

### 9.6 Introduction of DL 1024QAM for NR FR1

#### 9.6.1 General

#### 9.6.2 BS TX RF requirements

##### 9.6.2.1 Deployment and link level simulation

##### 9.6.2.2 EVM requirements

##### 9.6.2.3 Others

#### 9.6.3 UE RX RF requirements

**Email discussion summary of [99-e][140] NR\_DL1024QAM\_FR1, AI 9.6.3 – Fredrik Sundström**

**R4-2107666 Email discussion summary for [99-e][140]** **NR\_DL1024QAM\_FR1**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109109 Discussion on the UE RX RF requirements for 1024QAM for NR FR1**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109110 Draft CR for 38.101-1: Introduction of maximum input level for 1024QAM for NR FR1**

*Type: draftCR For: Endorsement  
 38.101-1 v17.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

### 9.7 Enhancement for NR high speed train scenario in FR1

#### 9.7.1 General

#### 9.7.2 RRM core requirements

##### 9.7.2.1 UE RRM core requirements for CA scenario

###### 9.7.2.1.1 General

###### 9.7.2.1.2 Intra-frequency measurements

###### 9.7.2.1.3 Inter-frequency measurements

#### 9.7.3 UE demodulation requirements (38.101-4)

##### 9.7.3.1 General

##### 9.7.3.2 PDSCH requirements for CA scenarios

##### 9.7.3.3 Enhanced transmission schemes

### 9.8 NR support for high speed train scenario in FR2

#### 9.8.1 General

**Email discussion summary of [99-e][141] NR\_HST\_FR2\_enh, AI 9.8.1, AI 9.8.3 – He Wang**

**R4-2107667 Email discussion summary for [99-e][141]** **NR\_HST\_FR2\_enh**

*Type: Other For: Information  
 Source: Moderator (Samsung)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2111282 TR for FR2 HST**

*Type: draft TR For: Endorsement  
 38.854 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 9.8.2 High speed train deployment scenario in FR2

##### 9.8.2.1 Deployment Scenario-A

##### 9.8.2.2 Deployment Scenario-B

##### 9.8.2.3 Channel modeling

##### 9.8.2.4 Others

#### 9.8.3 UE RF core requirements

**R4-2109570 On FR2 HST RF Requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm, Inc.*

**Decision:** The document was **not treated**.

##### 9.8.3.1 Baseline power class and UE RF requirement

**R4-2110236 Further Discussion on UE RF requirement for FR2 HST**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2111128 Consideration on UE beam and pwr requirements for FR2 HST**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Further discussion on the need for beams and UE pwr requirements

**Decision:** The document was **not treated**.

**R4-2111387 on RF requirement for NR FR2 HST**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

##### 9.8.3.2 Beam correspondence

**R4-2110237 Further Discussion on Beam Correspondence for FR2 HST UE**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2111008 UE beam correspondence for FR2 HST**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2111146 Views on Beam Correspondence requirements for FR2 HST UE**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Considerations on Beam correspondance for HST FR2 Ues

**Decision:** The document was **not treated**.

##### 9.8.3.3 Others

#### 9.8.4 RRM core requirements

##### 9.8.4.1 General

##### 9.8.4.2 Number of RX beams

##### 9.8.4.3 RRM requirements impacts

#### 9.8.5 Demodulation requirements

##### 9.8.5.1 General

##### 9.8.5.2 UE demodulation requirements

##### 9.8.5.3 BS demodulation requirements

### 9.9 Further RRM enhancement for NR and MR-DC

#### 9.9.1 General

#### 9.9.2 RRM core requirements

##### 9.9.2.1 SRS antenna port switching

##### 9.9.2.2 HO with PSCell

##### 9.9.2.3 PUCCH SCell activation/deactivation

### 9.10 NR and MR-DC measurement gap enhancements

#### 9.10.1 General

#### 9.10.2 RRM core requirements

##### 9.10.2.1 Pre-configured MG pattern(s)

##### 9.10.2.2 Multiple concurrent and independent MG patterns

##### 9.10.2.3 Network Controlled Small Gap

### 9.11 Further enhancement on NR demodulation performance

#### 9.11.1 General

#### 9.11.2 UE demodulation and CSI requirements

##### 9.11.2.1 MMSE-IRC receiver for inter-cell interference

##### 9.11.2.2 MMSE-IRC receiver for intra-cell inter-user interference

##### 9.11.2.3 Evaluation on CRS interference in scenarios with overlapping spectrum for LTE and NR

#### 9.11.3 BS demodulation requirements

##### 9.11.3.1 PUSCH demodulation requirements for FR1 256QAM

### 9.12 Solutions for NR to support non-terrestrial networks (NTN)

#### 9.12.1 General and work plan

##### 9.12.1.1 System parameters

##### 9.12.1.2 NTN architecture

##### 9.12.1.3 Regulatory information

##### 9.12.1.4 Others

#### 9.12.2 Coexistence aspects

##### 9.12.2.1 Coexistence scenarios and Simulation assumptions

##### 9.12.2.2 Simulation results

#### 9.12.3 RF requirements

##### 9.12.3.1 Network side requirements

##### 9.12.3.2 UE requirements

#### 9.12.4 RRM core requirements

##### 9.12.4.1 General

##### 9.12.4.2 GNSS-related requirements

##### 9.12.4.3 Timing requirements

##### 9.12.4.4 Measurement requirements

### 9.13 UE Power Saving Enhancements

#### 9.13.1 General and work plan

#### 9.13.2 UE measurements relaxation for RLM and/or BFD

### 9.14 NR Sidelink enhancement

#### 9.14.1 General and work plan

**Email discussion summary of [99-e][142] NRSL\_enh\_Part\_1, AI 9.14.1, AI 9.14.2, AI 9.14.3, AI 9.14.4, AI 9.14.7 – Suhwan Lim**

**R4-2107668 Email discussion summary for [99-e][142]** **NRSL\_enh\_Part\_1**

*Type: Other For: Information  
 Source: Moderator (LGE)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109691 TP on operating bands and channel arrangement for SL enhancement**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

**Abstract:**

The operating bands for SL enhancement and system parameters is captured for the TR 38.785.

**Decision:** The document was **not treated**.

**R4-2109704 Work Plan of RRM requirements for Rel-17 SL enhancement**

*Type: Work Plan For: Approval  
 Source: LG Electronics Polska*

**Abstract:**

It discusses work plan on RRM requirement for SL enhancement.

**Decision:** The document was **not treated**.

**R4-2109921 TR38.785 v0.2.0 TR Update for SL enhancement in Rel-17**

*Type: draft TR For: Agreement  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

update TR to capture the approved TPs in this meeting

**Decision:** The document was **not treated**.

#### 9.14.2 Spectrum request for SL operation

**R4-2111535 NR Sidelink in NR Band n14 and Coexistence Studies**

*Type: discussion For: Approval  
 Source: AT&T*

**Decision:** The document was **not treated**.

#### 9.14.3 System parameters (numerologies, rasters, CBW, etc)

**R4-2109692 Discussion on system parameters for SL enhancement**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110175 TP on channel bandwidth for newly introduced SL bands**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2111428 TP for 38.785: CBW for licensed band supporting NR V2X**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 9.14.4 UE RF requirements for NR SL enhancement

##### 9.14.4.1 TX requirements

##### 9.14.4.2 RX requirements

**R4-2109032 TP on UE Rx RF requirement for NR SL enhancement**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

**Decision:** The document was **not treated**.

#### 9.14.5 Partially used SL operation with NR Uu operating bands

**Email discussion summary of [99-e][143] NRSL\_enh\_Part\_2, AI 9.14.5 – Yuan Gao**

**R4-2107669 Email discussion summary for [99-e][143]** **NRSL\_enh\_Part\_2**

*Type: Other For: Information  
 Source: Moderator (CATT)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109947 RF requirements for partial used licensed band bewteen NR Uu and NR SL operation**

*Type: other For: Approval  
 Source: LG Electronics France*

**Abstract:**

provide detail RF requirements for intra-band con-current V2X operation

**Decision:** The document was **not treated**.

**R4-2109950 TP on RF requirements for intra-band con-current V2X operation in licensed band**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

TP to capture the detail RF requirements in TR38.785 in Rel-17

**Decision:** The document was **not treated**.

**R4-2110025 on full half duplex and TDM FDM operation scenario for intra-band con-current operation**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

##### 9.14.5.1 FDM operation

**R4-2109034 Discussion on FDM operation between SL and Uu**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2110024 on FDM intra-band concurrent operation**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2111187 FDM operation for partially used SL operation in licensed band**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on the FDM operation remaining issues

**Decision:** The document was **not treated**.

##### 9.14.5.2 TDM operation

**R4-2109033 Discussion on TDM operation between SL and Uu**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2110028 on TDM intra-band concurrent operation**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

##### 9.14.5.3 Synchronous operation between NR Uu and NR SL in a TDD band

**R4-2109035 Discussion on synchronous operation between SL and Uu**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109380 Timing reference for NR SL on SL enhancements**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Reference timing for NR SL is discussed

**Decision:** The document was **not treated**.

**R4-2109693 Further discussion on synchronization issues for intra-band V2X operation**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110026 on SL transmission timing**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110834 R17 SL transmission timing**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111189 SL UE synchronization issue for licensed operation**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on synchronization issue in licensed band operation

**Decision:** The document was **not treated**.

**R4-2111429 Further consideration on SL timing alignment**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

##### 9.14.5.4 Others

**R4-2109036 LS on synchronous operation between Uu and SL in TDD band n79**

*Type: LS out For: Approval  
 to RAN1  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109702 MPR for NR V2X intra-band con-current operation with Uu**

*Type: discussion For: Discussion  
 Source: LG Electronics Polska*

**Abstract:**

It discusses MPR for NR V2X intra-band con-current operation with Uu based on simulation results.

**Decision:** The document was **not treated**.

**R4-2111430 On synchronization reference source**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111431 TP for 38.785: synchronization reference source for SL enhancements**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 9.14.6 High power UE(PC2) for SL

**Email discussion summary of [99-e][144] NRSL\_enh\_Part\_3, AI 9.14.6 – Ye Liu**

**R4-2107670 Email discussion summary for [99-e][144]** **NRSL\_enh\_Part\_3**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

##### 9.14.6.1 TX requirements

**R4-2109037 Discussion on HPUE for NR SL enhancement**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2110398 Discussion on n47 PC2 MPR simulation results**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111432 CR for TS 38.101-1 update configured transmitted power for V2X (R16)**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0863 rev Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111433 CR for TS 38.101-1 update configured transmitted power for V2X (R17)**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0864 rev Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

##### 9.14.6.2 Coexistence study

**R4-2109695 TP on coexistence evaluation for PC2 SL UE in licensed band n38**

*Type: pCR For: Approval  
 38.785 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

**Abstract:**

In this text proposal, the coexistence evaluation for PC2 SL UE in licensed band n38 is captured for the TR 38.785.

**Decision:** The document was **not treated**.

**R4-2111188 Co-channel co-existence between SL and Uu**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our views on PC2 V2X UE in n38 from the regulatory/co-existence aspect

**Decision:** The document was **not treated**.

**R4-2111434 Consideration on co-existence study for n38 (SL) and adjacent band n7 (Uu)**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

##### 9.14.6.3 Others

**R4-2109694 Further discussion on PC2 NR V2X**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110022 further discussion on HPUE signalling issue**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110399 Discussion on n47 PC2 AMPR simulation results**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110833 R17 SL PC2**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2111435 Consideration on specific HPUE power class capability for NR V2X**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111436 draft LS on new power class 2 capability for NR-V2X**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 9.14.7 Other RF/general requirements for New SL enhancement

#### 9.14.8 RRM core requirements

### 9.15 Extending current NR operation to 71GHz

#### 9.15.1 General and work plan

**Email discussion summary of [99-e][145] NR\_ext\_to\_71GHz\_Part\_1, AI 9.15.1, AI 9.15.2, AI 9.15.3, AI 9.15.7 – Jiwoo Kim**

**R4-2107671 Email discussion summary for [99-e][145]** **NR\_ext\_to\_71GHz\_Part\_1**

*Type: Other For: Information  
 Source: Moderator (Intel)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109383 Proposals on coexistence simulation for extending current NR operation to 71 GHz**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides some preliminary simulation results based on the proposed assumptions and parameters and provides some proposals on coexistence simulation for extending current NR operation to 71.

**Decision:** The document was **not treated**.

**R4-2109474 60 GHz UE switching times**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Discussion of UE switching times and response LS to RAN1

**Decision:** The document was **not treated**.

**R4-2109697 Further discussion on channel bandwidths and corresponding spectrum utilization for B52.6GHz**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110950 NR 52.6 -71 GHz workplan (RRM)**

*Type: Work Plan For: Approval  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2111057 Further discussion on the FR2-extension vs. FR3 introduction for NR operation in 52.6 - 71 GHz range**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we continue the discussion on RAN4 aspects related to the 60 GHz frequency range designator, providing analysis and recommendations. Based on the discussion, it is also proposed to provide RAN4 feedback and recommendation to RAN. Rela

**Decision:** The document was **not treated**.

**R4-2111152 Further consideration on extension of FR2 or new Frequency Range (FR3) to introduce 52.6-71 GHz**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

Discussions and example of extending FR2

**Decision:** The document was **not treated**.

**R4-2111510 UE OTA test methods for 52.6 to 71 GHz frequency range**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

#### 9.15.2 Band plans and regulatory requirements

**R4-2109433 Overview of the regulatory parameters the 52.6 GHz to 71 GHz frequency range**

*Type: discussion For: Information  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109696 Further discussion on band plan for B52.6GHz**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110684 Bandplan for a NR band in the range 52.6GHz – 71GHz**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2111058 Analysis of the exemplary new band introduction to TS 38.104 specification**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide an analysis of the exemplary new band introduction to TS 38.104 specification, in order to highlight the arising issues due to differences in the system parameters for FR2 bands below/above 52.6 GHz. Related Draft CR to TS

**Decision:** The document was **not treated**.

**R4-2111059 Draft CR to TS 38.104: exemplary implementation of new bands with FR2.1 and FR2.2 frequency ranges**

*Type: draftCR For: Endorsement  
 38.104 v17.1.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

This Draft CR is provided as to show the implemenation of the proposed solution for the 52.6-71GHz range inclusion into the FR2. It is based on the proposal of two new frequency sub-ranges to be defined for FR2: FR2.1 and FR2.2.

**Decision:** The document was **not treated**.

#### 9.15.3 System parameters (numerologies, rasters, CBW, etc)

**R4-2109014 Discussion on the system parameters for 52.6-71 GHz**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109325 System parameters for NR operation in 52.6GHz - 71GHz**

*Type: discussion For: Discussion  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109475 60 GHz channel bandwidths, raster, and carrier aggregation**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Discuss what channel bandwidths to support for different SCS and what to support for intraband contiguous carrier aggregation. Discuss raster choice to coexist with 802.11 ad/ay

**Decision:** The document was **not treated**.

**R4-2109479 On system parameters for NR in 52.6GHz ~ 71GHz**

*Type: discussion For: Discussion  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2109698 Further discussion on channel raster and sync raster for B52.6GHz**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110001 View on Maximum Channel Bandwidth for 960kHz SCS**

*Type: other For: Approval  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2110023 on channelization for licensed and un-licensed band**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110171 On system parameters in 60 GHz NR**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2110483 52.6-71 GHz System Parameters**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

The focus of this contribution is to provide analysis on impacts of the agree bandwidths on, channel raster and spectrum utilization selections.

**Decision:** The document was **not treated**.

**R4-2110600 Discussion on system parameters for 52.6-71GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110685 System parameters for a NR band in the range 52.6GHz – 71GHz**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110992 Discussion maximum bandwidth for NR 52.6 to 71 GHz**

*Type: discussion For: (not specified)  
 Source: LG Electronics Finland*

**Decision:** The document was **not treated**.

**R4-2111170 Channelization aspects for 57-71GHz unlicensed band**

*Type: discussion For: Decision  
 Source: MediaTek Inc.*

**Abstract:**

This document provides some views and analysis to progress the channelization details for the 57-71GHz frequency range.

**Decision:** The document was **not treated**.

#### 9.15.4 UE RF requirements

**Email discussion summary of [99-e][146] NR\_ext\_to\_71GHz\_Part\_2, AI 9.15.4 + co-existence study –Phil Coan**

**R4-2107672 Email discussion summary for [99-e][146]** **NR\_ext\_to\_71GHz\_Part\_2**

*Type: Other For: Information  
 Source: Moderator (Qulacomm)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

##### 9.15.4.1 TX requirements

**R4-2109011 Views on UE Array and EIRP level at 60 GHz**

*Type: other For: Discussion  
 Source: Sony*

**Decision:** The document was **not treated**.

**R4-2109015 Co-existence simulation assumptions and some simulation results**

*Type: other For: Approval  
 Source: CATT*

**Decision:** The document was **not treated**.

**R4-2109446 On UE RF requirements for NR in the 52.6 - 71 GHz frequency range**

*Type: discussion For: Approval  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109476 60GHz UE TX emissions and EIRP**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Compare EU mask with ACLR and discuss Typical EIRP for smartphone UE

**Decision:** The document was **not treated**.

**R4-2109981 On UE TX requirements for operations up to 71 GHz**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we consider the UE power capability, unwanted emissions and spectrum utilization for operations in 57-71 GHz.

**Decision:** The document was **not treated**.

**R4-2110030 on UE TX requirement and regulation requirement**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2110172 On UE TX requirements in 60 GHz NR**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2110604 Discussion on UE power class for 60GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110686 On UE Tx RF aspects for a NR band in the range 52.6GHz – 71GHz**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110828 Reply LS of max UE conducted power and max UE EIRP for operation in the 52.6 – 71 GHz band**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110960 Discussion on maximum conducted and radiated output power**

*Type: discussion For: (not specified)  
 Source: LG Electronics Finland*

**Abstract:**

RAN1 has sent an LS to RAN4 [1], where RAN1 is asking RAN4 to provide more information on conducted and radiated power foreseen to be used within the 52.6 to 71 GHz frequency range.

This contribution provides information for the response LS to RAN1.

**Decision:** The document was **not treated**.

**R4-2110977 Discussion on maximum conducted and radiated output power**

*Type: discussion For: (not specified)  
 Source: LG Electronics Finland*

**Decision:** The document was **not treated**.

**R4-2111352 on 60GHz UE Tx RF requirements**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111379 on beam switching for 60GHz Band**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

##### 9.15.4.2 RX requirements

**R4-2110687 On UE Rx RF aspects for a NR band in the range 52.6GHz – 71GHz**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 9.15.5 BS RF requirements

##### 9.15.5.1 TX requirements

##### 9.15.5.2 RX requirements

#### 9.15.6 RRM core requirements

#### 9.15.7 Others

**R4-2108786 Discussions on system simulations and results for 60GHz**

*Type: other For: Discussion  
 Source: Qualcomm CDMA Technologies*

**Decision:** The document was **not treated**.

**R4-2109375 On frequency range definition between 52.6GHz and 71GHz**

*Type: discussion For: Agreement  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109445 Testability aspects for the 52.6 GHz to 71 GHz frequency range**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2109835 On frequency range definition for 52.6 - 71 GHz**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109874 Draft LS to RAN1 on beam switching gap for the frequency range 52 to 71 GHz**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we present some background information for beam switching time relevant for the frequency range 52 to 71 GHz. At the end of the contribution a draft LS is attached for discussion.

**Decision:** The document was **not treated**.

**R4-2110173 On frequency range definition for 60 GHz NR**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2110484 On 52.6 to 71 GHz maximum channel bandwidth for 960 kHz, draft LS to RAN1**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

There is a need to conclude the maximum channel bandwidth for 960 kHz SCS and to send feedback to RAN1. In this contribution the discussion and analysis is given with draft LS reply.

**Decision:** The document was **not treated**.

**R4-2110603 Discussion on frequency range definition for 52.6-71GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110605 Discussion on switching delay for 52.6-71GHz**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111060 Draft LS to RAN: RAN4 recommendation for the 52.6 - 71 GHz frequency range designation**

*Type: LS out For: Approval  
 to 3GPP TSG RAN, cc 3GPP RAN WG1, 3GPP RAN WG2, 3GPP RAN WG5  
 Source: Huawei*

**Abstract:**

Draft LS to RAN, providing RAN4 recommendation on the 52.6 - 71 GHz frequency range designation.

**Decision:** The document was **not treated**.

### 9.16 Enhancements to Integrated Access and Backhaul (IAB) for NR

#### 9.16.1 General and work plan

#### 9.16.2 RF requirements

#### 9.16.3 RRM core requirements

#### 9.16.4 Others

### 9.17 NR coverage enhancements

**Email discussion summary of [99-e][147] NR\_cov\_enh, AI 9.17 – Shan Yang**

**R4-2107673 Email discussion summary for [99-e][147]** **NR\_cov\_enh**

*Type: Other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

#### 9.17.1 General and work plan for RF core requirements

**R4-2111194 Reply LS to RAN1 latest question on phase discontinuity**

*Type: LS out For: Approval  
 to RAN1  
 Source: Ericsson*

**Abstract:**

In this paper, the questions in by RAN1 LS is discussed and proposal of LS is followed

**Decision:** The document was **not treated**.

#### 9.17.2 Phase continuity and power consistency for PUSCH and PUCCH repetition

**R4-2108800 Phase continuity with the other channels in the gap**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109012 Views on phase continuity and power consistency for PUSCH and PUCCH repetition**

*Type: other For: Discussion  
 Source: Sony*

**Decision:** The document was **not treated**.

**R4-2109263 Further discussion on phase continuity for LS reply**

*Type: other For: Approval  
 Source: InterDigital Communications*

**Abstract:**

In this contribution we are discussing the new questions asked by RAN1 and suggest answers.

**Decision:** The document was **not treated**.

**R4-2109581 On phase continuity and power consistency for PUCCH and PUSCH repetition**

*Type: discussion For: Discussion  
 Source: China Telecom*

**Decision:** The document was **not treated**.

**R4-2109743 Phase continuity and power consistency for PUSCH and PUCCH repetition**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2110611 Discussion on reply LS on NR coverage enhancement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110612 Discussion on phase discontinuity and power inconsistency tolerance across different repetitions**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111156 Further analysis on PUSCH/PUCCH repetition impacts**

*Type: discussion For: Decision  
 Source: MediaTek Inc.*

**Abstract:**

Further analysis on PUSCH/PUCCH repetition impacts.

**Decision:** The document was **not treated**.

**R4-2111195 Simulation assumption for phase tolerance for PUSCH PUCCH repeition**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, the simulation assumption for LLS for phase discontinuity tolerance is proposed

**Decision:** The document was **not treated**.

**R4-2111385 on phase continuty for multiple transmissions**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111386 simulation assumption for phase tolerance Cov\_enh**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

### 9.18 Rel-17 enhancements on MIMO for NR

#### 9.18.1 General and work plan for RF core requirements

**Email discussion summary of [99-e][148] NR\_feMIMO, AI 9.18.1 – Xutao Zhou**

**R4-2107674 Email discussion summary for [99-e][148]** **NR\_feMIMO**

*Type: Other For: Information  
 Source: Moderator (Samsung)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109681 Initial analysis on Enhancements on MIMO for NR RF requirements**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109836 Impact to RF requirements for further enhancements on MIMO**

*Type: discussion For: Approval  
 Source: Samsung*

**Abstract:**

Initial analysis on impac to RF requirements and work plan

**Decision:** The document was **not treated**.

#### 9.18.2 General and work plan for RRM core requirements

### 9.19 Support of reduced capability NR devices

**Email discussion summary of [99-e][149] NR\_RedCap, AI 9.19, AI 9.19.1 –Dominique Evereare**

**R4-2107675 Email discussion summary for [99-e][149] NR\_RedCap**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2109879 Draft Reply LS on Half-duplex FDD switching time for RedCap UE**

*Type: LS out For: Approval  
 to RAN1  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 9.19.1 General and work plan for RF core requirements

**R4-2109675 General views on Redcap UE RF requirements**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109747 On the scope of work on RF core requirements Redcap**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109880 General discussion for RedCap UE**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111196 RAN4 RF WI work plan for RedCap**

*Type: Work Plan For: Approval  
 Source: Ericsson*

**Abstract:**

the work plan for RedCap for RF work is proposed

**Decision:** The document was **not treated**.

**R4-2111197 RF impact analysis on R17 RedCap**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, the RF impact is proposed for RedCap Work

**Decision:** The document was **not treated**.

**R4-2111198 Reply LS to Half-duplex FDD switching for RedCap UE**

*Type: LS out For: Approval  
 to RAN1  
 Source: Ericsson*

**Abstract:**

In this paper, the questions in by RAN1 is discussed and proposal of LS is followed

**Decision:** The document was **not treated**.

**R4-2111424 RedCap RF Issues**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Discuss plan/proposal for guard times and REFSENS and others

**Decision:** The document was **not treated**.

#### 9.19.2 General and work plan for RRM core requirements

### 9.20 Positioning enhancements for NR

#### 9.20.1 General and work plan for RRM core requirements

### 9.21 Multi-Radio Dual-Connectivity enhancements

#### 9.21.1 General and work plan for RRM core requirements

### 9.22 Enhanced IIoT and URLLC support

#### 9.22.1 General and work plan for RRM core requirements

## 10 Rel-17 Study Items for NR

### 10.1 Study on enhanced test methods for FR2 in NR

#### 10.1.1 General

#### 10.1.2 Test methodology for high DL power and low UL power test cases

#### 10.1.3 Polarization basis mismatch

#### 10.1.4 Enhanced test methods for inter-band (FR2+FR2) CA

#### 10.1.5 Extreme temperature conditions

#### 10.1.6 Test time reduction

#### 10.1.7 Extension of frequency applicability of permitted methods in 38.810 for band n262

### 10.2 Study on Efficient utilization of licensed spectrum that is not aligned with existing NR channel bandwidths

**Email discussion summary of [99-e][150] FS\_NR\_eff\_BW\_util, AI 10.2 – Esther Sienkiewicz**

**R4-2107676 Email discussion summary for [99-e][150]** **FS\_NR\_eff\_BW\_util**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**GTW session on May 20th:**

**Issue 2-2: irregularBW in UL**

* Agreement
  + For all the potential approaches, to support UL for irregularBW from UE perspective needs further discussion in future release,
  + For widerCHBW approach, to support irregular CBW for DL only the following discussions are needed
    - Need further discussion on support of asymmetric bandwidths
    - Need further discussion on support of TX-RX separation

**Conclusions:**

**Topic**

#### 10.2.1 General and work plan

**R4-2110487 Updated draft TR 38.844**

*Type: draft TR For: Agreement  
 38.844 v0.0.3 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

update after RAN4#98bis-e

**Decision:** The document was **not treated**.

#### 10.2.2 Evaluation of use of larger channel bandwidths than operator licensed bandwidth

**R4-2109427 On the use of intermediate wider channel bandwidth**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2110661 Evaluation for use of larger channel bandwidth**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111147 Update of utilizing immediate wider bandwidth**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

Update of utilizing immediate wider bandwidth

**Decision:** The document was **not treated**.

#### 10.2.3 Evaluation of use of overlapping UE channel bandwidths

**R4-2109245 Comparison of alternate methods for Irregular CBW**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

**Decision:** The document was **not treated**.

**R4-2109426 On overlapping UE channel bandwidth**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Decision:** The document was **not treated**.

**R4-2109484 Discussion on the approaches of overlapping channel bandwidths**

*Type: discussion For: Discussion  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2109579 On the Schemes Related to Overlapping Channel Bandwidths**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110488 Evaluating Overlapping Channel Bandwidth Approaches**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution further discussion on details relating to Overlapping channel bandwidth approaches is analyzed both from UE and BS perspectives

**Decision:** The document was **not treated**.

**R4-2110662 Evaluation for overlapping UE channel bandwidths**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111219 On the use of overlapping channel bandwidths from UE perspective**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 10.2.4 Others

**R4-2109587 Comparison of Different Schemes**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111148 Draft TP to TR38.844 on wider channel BW method**

*Type: discussion For: Approval  
 Source: Ericsson*

**Decision:** The document was **not treated**.

### 10.3 Study on band combination handling in RAN4

**Email discussion summary of [99-e][151] FS\_BC\_handling, AI 10.3 + some Tdocs in AI 15 – Zhifeng Ma**

**R4-2107677 Email discussion summary for [99-e][151]** **FS\_BC\_handling**

*Type: Other For: Information  
 Source: Moderator (ZTE)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

#### 10.3.1 General and TR

**R4-2109535 TR 38.XXX V010 Band combination handling**

*Type: other For: Endorsement  
 Source: ZTE Corporation*

**Abstract:**

This paper is to provide TR 38.XXX V010 for band combination handling.

**Decision:** The document was **not treated**.

#### 10.3.2 How to introduce band combinations including TP format

**R4-2110411 TP for 38.xxx to captuer the request's template and workflow**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 10.3.3 Rules and guidelines of specifying band combinations including notations of CA/DC combinations

**R4-2109537 TP on rules of CA configuration table**

*Type: other For: Endorsement  
 Source: ZTE Corporation*

**Abstract:**

In this proposal, we provides the rules of CA configuration table as a text proposal to the new TR.

**Decision:** The document was **not treated**.

#### 10.3.4 Improving RAN4 specification structures and reducing redundant contents

**R4-2108915 New way for defining dTib and dRib**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109536 Simplifications on delta TIB and RIB tables**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Abstract:**

In this paper, we’d like to share our further considerations on the simplification for ?TIB,c and ?RIB,c table.

**Decision:** The document was **not treated**.

#### 10.3.5 Others

### 10.4 Study on extended 600MHz NR band

**Email discussion summary of [99-e][152] FS\_NR\_600MHz\_ext, AI 10.4 – Christian Bergljung**

**R4-2107678 Email discussion summary for [99-e][152]** **FS\_NR\_600MHz\_ext**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**GTW session on May 20th:**

* Agreement:
  + Provide neutral decriptions of pros and cons for each optional solution in TR.
  + RAN4 should minimize any direct or indirect indication of preference among solutions in TPs

**Topic**

#### 10.4.1 General

**R4-2109132 Text Proposal for TR 38 860**

*Type: pCR For: Approval  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Spark NZ Ltd*

**Abstract:**

This contribution provides text proposal for TR 38 860

**Decision:** The document was **not treated**.

**R4-2111043 TP to TR 38.860: B1/B2 background**

*Type: pCR For: Agreement  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

In this TP to TR38.860 we provide background information on the B1 and B2 options, plus editorials corrections identified in the TR.

**Decision:** The document was **not treated**.

#### 10.4.2 Regulatory study

#### 10.4.3 Coexistence study

**R4-2109753 Coexistence study for extended 600 MHz NR frequency band**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2109785 TP to TR 38.860 on Coexistence for APT 600 MHz**

*Type: pCR For: Approval  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

TP on coexistence is proposed.

**Decision:** The document was **not treated**.

**R4-2110090 TP to TR 38.860 - Coexistence aspects**

*Type: pCR For: Agreement  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This TP to TR is capturing agreements related to coexistence

**Decision:** The document was **not treated**.

**R4-2111044 TP to TR 38.860: coexistence with other services**

*Type: pCR For: Agreement  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

In this TP to TR38.860 we provide inputs to the co-existence analysis with non-3GPP services, based on the WF agreed last meeting in R4-2105421.

**Decision:** The document was **not treated**.

#### 10.4.4 Study on frequency arrangements (such as options B1 and B2)

**R4-2108908 Filter options for B1**

*Type: discussion For: Discussion  
 Source: Spark NZ Ltd*

**Abstract:**

This contribution seeks guidance on duplexer arrangements of filter option B1 that uses dual duplexers

**Decision:** The document was **not treated**.

**R4-2109460 Study on extended 600MHz NR band**

*Type: report For: Agreement  
 Source: Spark NZ Ltd*

**Abstract:**

This contribution provides guidance on filter options that are not aligned with the AWG request and should not be further studied

**Decision:** The document was **withdrawn**.

**R4-2109461 Study on extended 600MHz NR band**

*Type: report For: Agreement  
 Source: Spark NZ Ltd*

**Abstract:**

This contribution provides guidance on filter options that are not aligned with the AWG request and should not be further studied

**Decision:** The document was **withdrawn**.

**R4-2109462 Study on extended 600MHz NR band**

*Type: other For: Agreement  
 Source: Spark NZ Ltd*

**Abstract:**

This contribution discusses option B2a and suggests that this is not aligned with the request from AWG and should not be further studied

**Decision:** The document was **not treated**.

**R4-2109786 Frequency arrangements for APT 600 MHz**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Option B1/B2/B2a is discussed.

**Decision:** The document was **not treated**.

**R4-2110165 TP to TR38.860 on band plan and duplex filter considerations for 600 MHz**

*Type: pCR For: Approval  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110978 TP for TR 38.860: Filter option B1**

*Type: pCR For: Approval  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111018 Extended 600MHz duplexers and band definitions options evaluation**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

Since it was possible to extrapolate the additional filter options from our B28 full and n71 full duplexer performance using the same principles than in last meeting and for the sake of completeness this contribution provides the additional filter options

**Decision:** The document was **not treated**.

**R4-2111045 TP to TR 38.860: B1 full band filter feasibility analysis**

*Type: pCR For: Agreement  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

In this TP to TR38.860 we provide B1 full band filter feasibility analysis. Based on further evaluation results with an optimized design, the full band duplexer for option B1 was recognized as being able to provide equivalent rejection capability as that

**Decision:** The document was **not treated**.

**R4-2111443 Further evaluation on 600MHz duplexer schemes**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 10.4.5 Others

**R4-2108860 Study on extended 600MHz NR band**

*Type: pCR For: Approval  
 38.860 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Spark NZ Ltd*

**Abstract:**

This contribution provides text for TR 38 860

**Decision:** The document was **withdrawn**.

### 10.5 Study on high power UE (power class 2) for one NR FDD band

**Email discussion summary of [99-e][153] FS\_NR\_PC2\_UE\_FDD, AI 10.5 – Basaier Jialade**

**R4-2107679 Email discussion summary for [99-e][153] FS\_NR\_PC2\_UE\_FDD**

*Type: Other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

#### 10.5.1 General

**R4-2108866 TR 38.861 v0.1.0 FS\_NR\_PC2\_UE\_FDD**

*Type: draft TR For: Approval  
 38.861 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: China Unicom*

**Decision:** The document was **not treated**.

**R4-2110163 Half duplex operation for PC2 FDD bands**

*Type: other For: Approval  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2110197 Discussion on HP UE for FDD bands**

*Type: discussion For: Discussion  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

#### 10.5.2 Scheme(s) to comply with the SAR limits

**R4-2109700 Discussion on SAR scheme of FDD HPUE**

*Type: discussion For: Approval  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110829 R17 FDD HPUE**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

#### 10.5.3 Interference issues

**R4-2109998 TP on Sensitivity degradation in NR n3 for PC2 UE in FDD band**

*Type: pCR For: Approval  
 38.861 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

Provide RF component current status in FDD band and provide sensitivity degradation for PC2 UE in n1/n3.

**Decision:** The document was **not treated**.

**R4-2110433 Discussion on interference for HPUE FDD band**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

#### 10.5.4 System performance evaluations

**R4-2109699 System performance evaluation on FDD HPUE**

*Type: discussion For: Decision  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2109763 System performance evaluation on FDD HPUE**

*Type: discussion For: Discussion  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2110798 TP to TR38.861: Simulaiton results for FDD HPUE**

*Type: pCR For: (not specified)  
 38.861 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111446 Further system level simulation for FDD HPUE**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

### 10.6 Optimizations of pi/2 BPSK uplink power in NR

**Email discussion summary of [99-e][154] FS\_NR\_Opt\_pi2BPSK, AI 10.6 – Chan Fernando**

**R4-2107680 Email discussion summary for [99-e][154]** **FS\_NR\_Opt\_pi2BPSK**

*Type: Other For: Information  
 Source: Moderator (Qulacomm)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

#### 10.6.1 General and work plan

**R4-2109372 Workplan for SI on optimizations of pi/2 BPSK uplink power in NR**

*Type: Work Plan For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Workplan for ‘Optimizations of pi/2 BPSK uplink power in NR’ is presented

**Decision:** The document was **not treated**.

**R4-2109373 TR skeleton for SI on optimizations of pi\_2 BPSK uplink power**

*Type: discussion For: Approval  
 38.101 v CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

TR for ‘Optimizations of pi/2 BPSK uplink power in NR’ is presented

**Decision:** The document was **not treated**.

**R4-2109377 TP to TR on optimizations of pi/2 BPSK uplink power in NR**

*Type: discussion For: Approval  
 38.101-1 v CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

TP to TR for ‘Optimizations of pi/2 BPSK uplink power in NR’ is presented

**Decision:** The document was **not treated**.

**R4-2109740 Simulation assumptions for pi/2 BPSK with spectrum shaping**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 10.6.2 UE Tx power for pi/2 BPSK

**R4-2109371 Inputs for analysing pi/2 BPSK uplink power**

*Type: discussion For: Approval  
 38.101 v CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Input waveforms, pulse shaping filters and link simulations for evaluating higher UL powers are presented

**Decision:** The document was **not treated**.

**R4-2109725 Considerations for pi/2 BPSK with spectrum shaping study**

*Type: discussion For: (not specified)  
 Source: Indian Institute of Tech (H)*

**Decision:** The document was **not treated**.

**R4-2109742 Achievable UE Tx power for pi/2 BPSK with different shaping filters**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2111449 On feasibility of power enhancement for Pi/2 BPSK**

*Type: other For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 10.6.3 SAR analysis

#### 10.6.4 Shaping filter characteristics

**R4-2109741 Receiver performance for pi/2 BPSK with different  spectral shaping filters**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

### 10.7 Study on 5G NR UE Application Layer Data Throughput Performance

#### 10.7.1 General and work plan

#### 10.7.2 Test methodology

#### 10.7.3 Test parameters

## 11 Rel-17 Work Items for LTE

### 11.1 LTE inter-band Carrier Aggregation for 2 bands DL with 1 band UL

**Email discussion summary of [99-e][155] LTE\_Baskets, AI 11.1 ~ AI 11.5 – Per Lindell**

**R4-2107681 Email discussion summary for [99-e][155]** **LTE\_Baskets**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

#### 11.1.1 Rapporteur Input (WID/TR/CR)

**R4-2110788 Revised WID: Rel17 LTE inter-band CA for 2 bands DL with 1 band UL**

*Type: WID revised For: (not specified)  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110789 TR 36.717-02-01 Rel-17 LTE inter-band CA for 2 bands DL and 1 band UL CA**

*Type: draft TR For: (not specified)  
 36.717-02-01 v0.4.0 CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111021 Big CR to TS36.101: Rel-17 LTE inter-band CA for 2 bands DL and 1 band UL CA**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5787 rev Cat: B (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

#### 11.1.2 UE RF with harmonic, close proximity and isolation issues

#### 11.1.3 UE RF without specific issues

### 11.2 LTE inter-band Carrier Aggregation for 3 bands DL with 1 band UL

#### 11.2.1 Rapporteur Input (WID/TR/CR)

**R4-2111392 Introduction of completed R17 3DL band combinations to TS 36.101**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5794 rev Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111393 Revised WID for LTE inter-band CA for 3 bands DL with 1 bands UL**

*Type: WID revised For: Agreement  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111414 TR 37.717-03-01 0.3.0**

*Type: draft TR For: Approval  
 36.717-03-01 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

#### 11.2.2 UE RF with harmonic, close proximity and isolation issues

#### 11.2.3 UE RF without specific issues

### 11.3 LTE inter-band Carrier Aggregation for x bands DL (x=4, 5) with 1 band UL

#### 11.3.1 Rapporteur Input (WID/TR/CR)

**R4-2109775 Introduction of LTE inter-band Carrier Aggregation for x bands DL (x=4, 5) with 1 band UL to TS36.101**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5775 rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This is a big CR for the basket work item on LTE CA 4DL/1UL and 5DL/1UL.

**Decision:** The document was **not treated**.

**R4-2111208 Revised WID: LTE Advanced inter-band CA Rel-17 for x bands DL (x=4, 5, 6) with 1 band UL**

*Type: WID revised For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2111209 TR 36.717-04-01 v0.5.0**

*Type: draft TR For: Approval  
 36.717-04-01 v0.5.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 11.3.2 UE RF with 4 LTE bands CA

#### 11.3.3 UE RF with 5 LTE bands CA

### 11.4 LTE inter-band Carrier Aggregation for 2 bands DL with 2 band UL

#### 11.4.1 Rapporteur Input (WID/TR/CR)

**R4-2111453 Introduction of completed LTE CA for 2 bands DL with 2 bands UL into Rel-17 TS 36.101**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5795 rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111454 Revised WID for LTE inter-band CA for 2 bands DL with 2 bands UL**

*Type: WID revised For: Endorsement  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111455 TR 36.717-02-02 v0.1.0**

*Type: draft TR For: Endorsement  
 36.717-02-02 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2111456 Updated scope of inter-band CA with 2DL and 2UL bands**

*Type: pCR For: Approval  
 36.717-02-02 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 11.4.2 UE RF with harmonic, close proximity and isolation issues

#### 11.4.3 UE RF without specific issues

**R4-2108867 TP for TR 36.717-02-02 to add coexistence table for LTE UL CA\_8A-20A**

*Type: pCR For: Approval  
 36.717-02-02 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: VODAFONE Group Plc*

**Abstract:**

This contribution proposes a co-existence requirements table for LTE UL configuration CA\_8A-20A based on the existing single carrier requirements for band 8 and 20. It was missing in the initial TP approved in RAN4#98-bis-e.

**Decision:** The document was **revised to R4-2107736**.

**R4-2107736 TP for TR 36.717-02-02 to add coexistence table for LTE UL CA\_8A-20A**

*Type: pCR For: Approval  
 36.717-02-02 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: VODAFONE Group Plc*

**Abstract:**

This contribution proposes a co-existence requirements table for LTE UL configuration CA\_8A-20A based on the existing single carrier requirements for band 8 and 20. It was missing in the initial TP approved in RAN4#98-bis-e.

**Decision:** The document was **not treated**.

**R4-2108868 TP for TR 36.717-02-02 to add coexistence table for LTE UL CA\_8A-28A**

*Type: pCR For: Approval  
 36.717-02-02 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: VODAFONE Group Plc*

**Abstract:**

This contribution proposes a co-existence requirements table for LTE UL configuration CA\_8A-28A based on the existing single carrier requirements for band 8 and 28. It was missing in the initial TP approved in RAN4#98-bis-e.

**Decision:** The document was **revised to R4-2107737**.

**R4-2107737 TP for TR 36.717-02-02 to add coexistence table for LTE UL CA\_8A-28A**

*Type: pCR For: Approval  
 36.717-02-02 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: VODAFONE Group Plc*

**Abstract:**

This contribution proposes a co-existence requirements table for LTE UL configuration CA\_8A-28A based on the existing single carrier requirements for band 8 and 28. It was missing in the initial TP approved in RAN4#98-bis-e.

**Decision:** The document was **not treated**.

### 11.5 LTE inter-band Carrier Aggregation for x bands DL (x= 3, 4, 5) with 2 band UL

#### 11.5.1 Rapporteur Input (WID/TR/CR)

**R4-2109773 TR 36.717-03-02 v0.4.0 TR update for LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL in Rel-17**

*Type: draft TR For: Agreement  
 36.717-03-02 v0.3.0 CR- rev Cat: (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

Draft TR to capture the approved TPs in this meeting

**Decision:** The document was **not treated**.

**R4-2109774 Revised WID on LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL in Rel-17**

*Type: WID revised For: Endorsement  
 Source: LG Electronics France*

**Abstract:**

update WID to reflect progress and capture new DC band combos in this meeting

**Decision:** The document was **not treated**.

**R4-2109814 Introduction of LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL to TS36.101**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5776 rev Cat: B (Rel-17)  
  
 Source: LG Electronics France*

**Abstract:**

Big CR to capture new LTE-A CA band combination in rel-17

**Decision:** The document was **not treated**.

#### 11.5.2 UE RF with MSD

#### 11.5.3 UE RF without MSD

### 11.6 RRM for LTE CA basket WIs

#### 11.6.1 RRM Core (36.133)

#### 11.6.2 RRM Perf (36.133)

### 11.7 New WID on Additional LTE bands for UE category M1&M2 and/or NB1&NB2 in Rel-17

**Email discussion summary of [99-e][156] LTE\_bands\_R17\_M1\_M2\_NB1\_NB2, AI 11.7 – Chunhui Zhang**

**R4-2107682 Email discussion summary for [99-e][156] LTE\_bands\_R17\_M1\_M2\_NB1\_NB2**

*Type: Other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

#### 11.7.1 Rapporteur Input (WID/TR/CR)

#### 11.7.2 RF

**R4-2111193 On B24 A-MPR for CAT-M1/M2**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, we present our view on A-MPR for the LTE Cat-M1/M2 device

**Decision:** The document was **not treated**.

#### 11.7.3 Others

### 11.8 Modification of LTE Band 24 specifications to comply with updated regulatory emission limits

**Refer to Email discussion summary of [99-e][115] NR\_LTE\_band\_n24, AI 8.7 & AI 11.8 –Ojas Choksi**

#### 11.8.1 UE RF requirements

**R4-2108987 CR for updates related to LTE band 24 in 36.101 (Rel-10)**

*Type: CR For: Agreement  
 36.101 v10.29.0 CR-5751 rev Cat: F (Rel-10)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108988 CR for updates related to LTE band 24 in 36.101 (Rel-11)**

*Type: CR For: Agreement  
 36.101 v11.26.0 CR-5752 rev Cat: A (Rel-11)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108989 CR for updates related to LTE band 24 in 36.101 (Rel-12)**

*Type: CR For: Agreement  
 36.101 v12.26.0 CR-5753 rev Cat: A (Rel-12)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108990 CR for updates related to LTE band 24 in 36.101 (Rel-13)**

*Type: CR For: Agreement  
 36.101 v13.20.0 CR-5754 rev Cat: A (Rel-13)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108991 CR for updates related to LTE band 24 in 36.101 (Rel-14)**

*Type: CR For: Agreement  
 36.101 v14.18.0 CR-5755 rev Cat: A (Rel-14)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108992 CR for updates related to LTE band 24 in 36.101 (Rel-15)**

*Type: CR For: Agreement  
 36.101 v15.14.0 CR-5756 rev Cat: A (Rel-15)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108993 CR for updates related to LTE band 24 in 36.101 (Rel-16)**

*Type: CR For: Agreement  
 36.101 v16.9.0 CR-5757 rev Cat: A (Rel-16)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

**R4-2108994 CR for updates related to LTE band 24 in 36.101 (Rel-17)**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5758 rev Cat: A (Rel-17)  
  
 Source: Ligado Networks*

**Decision:** The document was **not treated**.

#### 11.8.2 BS RF requirements

#### 11.8.3 RRM requirements

#### 11.8.4 Others

### 11.9 Additional enhancements for NB-IoT and LTE-MTC

#### 11.9.1 General and work plan

#### 11.9.2 Support of 16QAM in NB-IoT

**Email discussion summary of [99-e]** **[157] NB\_IOTenh4\_LTE\_eMTC6, AI 11.9.2, AI 11.9.3 AI 11.9.5 – Jin Wang**

**R4-2107683 Email discussion summary for [99-e][157]** **NB\_IOTenh4\_LTE\_eMTC6**

*Type: Other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

##### 11.9.2.1 BS RF requirements

##### 11.9.2.2 UE RF requirements

**R4-2108978 EVM limit in NB-IoT IBE mask**

*Type: CR For: Agreement  
 36.101 v17.1.0 CR-5750 rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2109948 MPR for NB-IoT 16-QAM**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2111192 UE RF impact analysis on R17 NB\_IoT**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on the UE RF impact on NB-IoT for this objective.

**Decision:** The document was **not treated**.

**R4-2111295 Discussion on UE RF requirements for 16QAM NB-IoT uplink**

*Type: discussion For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 11.9.3 Support of power reduction for PRACH, PUCCH, and full-PRB PUSCH in MTC

##### 11.9.3.1 UE RF requirements

**R4-2109387 Proposals on support of power reduction for PRACH, PUCCH, and full-PRB PUSCH in MTC**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides some information on the related moderated email discussion in RAN and proposes the WF to complete this objective in RAN4.

**Decision:** The document was **withdrawn**.

**R4-2111061 Proposals on support of power reduction for PRACH, PUCCH, and full-PRB PUSCH in MTC**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides some information on the related moderated email discussion in RAN and proposes the WF to complete this objective in RAN4.

**Decision:** The document was **not treated**.

**R4-2111190 RF impact analysis on Rel-17 eMTC WID**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on the RF impact for the Rel-17 eMTC.

**Decision:** The document was **not treated**.

#### 11.9.4 RRM requirements

#### 11.9.5 Others

## 12 Rel-17 Study Items for LTE

### 12.1 High-power UE operation for fixed-wireless/vehicle-mounted use cases in LTE bands 5 and 12 and NR band n71

**Email discussion summary of [99-e][158] FS\_LTE\_NR\_HPUE\_FWVM, AI 12.1 – Man Hung Ng**

**R4-2107684 Email discussion summary for [99-e][158] FS\_LTE\_NR\_HPUE\_FWVM**

*Type: Other For: Information  
 Source: Moderator (Nokia)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic**

**R4-2110946 TP to TR 37.880 UL harmonic analysis for fixed-wireless vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: pCR For: Approval  
 37.880 v1.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei Technologies France*

**Decision:** The document was **not treated**.

#### 12.1.1 General

**R4-2109388 TR 37.880 V1.1.1: High-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: draft TR For: Approval  
 37.880 v1.0.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

TR 37.880 V1.1.1 for approval

**Decision:** The document was **withdrawn**.

**R4-2109389 TP to TR 37.880: Conclusion on feasibility studies for High-power UE Vs Public Safety operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: pCR For: Approval  
 37.880 v1.0.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides the conclusion of this study item from the recorded findings and a text proposal for approval to include the conclusion into TR 37.880.

**Decision:** The document was **withdrawn**.

**R4-2111007 TR 37.880 V1.1.1: High-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: draft TR For: Approval  
 37.880 v1.1.1 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

TR 37.880 V1.1.1 for approval

**Decision:** The document was **not treated**.

**R4-2111109 TP to TR 37.880: Conclusion on feasibility studies for High-power UE Vs Public Safety operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: pCR For: Approval  
 37.880 v1.0.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides the conclusion of this study item from the recorded findings and a text proposal for approval to include the conclusion into TR 37.880.

**Decision:** The document was **not treated**.

#### 12.1.2 Coexistence study

**R4-2109390 TP to TR 37.880: Coexistence studies for High-power UE Vs Public Safety operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: pCR For: Approval  
 37.880 v1.0.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides some discussion on the coexistence studies for this scenario and a text proposal for approval to record the discussion into TR 37.880.

**Decision:** The document was **not treated**.

#### 12.1.3 UE RF

**R4-2109391 TP to TR 37.880: Modem software changes for High-power UE Vs Public Safety operation for fixed-wireless/vehicle-mounted use cases in Band 12, Band 5, and Band n71**

*Type: pCR For: Approval  
 37.880 v1.0.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution provides some discussion on the required SW changes for HPUE implementation and a text proposal for approval to record the discussion into TR 37.880.

**Decision:** The document was **not treated**.

## 13 Liaison and output to other groups

### 13.1 R17 related

**LS reply on power control for NR-DC**

**R4-2108801 On Further Reply LS on power control for NR-DC**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2111354 discussion for Reply LS on power control for NR-DC**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2109682 Discussion and Reply on Further Reply LS on power control for NR-DC**

*Type: LS out For: Discussion  
 to RAN1, cc RAN2  
 Source: vivo*

**Decision:** The document was **not treated**.

### 13.2 Others

**Email discussion summary of [99-e][159] NR\_reply\_LS\_RF\_Part1 – Jinqiang Xing**

**R4-2107684 Email discussion summary for [99-e][159] NR\_reply\_LS\_RF\_Part1**

*Type: Other For: Information  
 Source: Moderator (Oppo)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic #1: LS reply: ON/OFF time mask**

**R4-2108802 ON/OFF time mask inconsistency issue**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2109684 Discussion and reply LS On minimum requirements for Transmit ON/OFF time mask in UL MIMO FR1**

*Type: LS out For: Discussion  
 to RAN5  
 Source: vivo*

**Decision:** The document was **not treated**.

**LS**

**R4-2109368 Reply LS On minimum requirements for Transmit ON/OFF time mask in UL MIMO FR1**

*Type: LS out For: (not specified)  
 to RAN5  
 Source: Qualcomm India Pvt Ltd*

**Decision:** The document was **not treated**.

**R4-2110805 Reply LS of UL MIMO ON OFF time mask**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**Topic #2: DC location**

**R4-2111390 Reply LS to RAN2 on DC location**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**Email discussion summary of [99-e][160] NR\_reply\_LS\_RF\_Part2 – Aijun Cao**

**R4-2107686 Email discussion summary for [99-e][160] NR\_reply\_LS\_RF\_Part2**

*Type: Other For: Information  
 Source: Moderator (ZTE)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Information:**

**Conclusions:**

**Topic#1: Dual uplink IMD**

**R4-2109685 Discussion and reply LS on Clarification on exception requirements for Intermodulation due to Dual uplink (IMD)**

*Type: LS out For: Discussion  
 to RAN5  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2110198 Discussion on reply LS on Clarification on exception requirements for Intermodulation due to Dual uplink (IMD)**

*Type: discussion For: Approval  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

R4-2110396 is moved from AI 4.1.2.3 to AI 13.2

**R4-2110396 Discussion and draft Reply LS on exception requirements for Intermodulation due to Dual uplink (IMD)**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110437 Discussion on reply LS on Clarification on exception requirements for Intermodulation due to Dual uplink (IMD)**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2111105 Discussion on requirements without MSD in 2UL IMD scenario**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion on requirements without MSD in 2UL IMD scenario

**Decision:** The document was **not treated**.

**R4-2110806 Discussion on RAN5 LS of exception requirements**

*Type: discussion For: Approval  
 Source: OPPO*

**Decision:** The document was **not treated**.

**Topic #2: Rel-15 LS reply related to Inter-band (NG)EN-DC/NE-DC Capabilities**

**R4-2109417 On draft reply LS on the Intra-band and Inter-band (NG)EN-DC/NE-DC Capabilities**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Abstract:**

For reply to RAN2 LS (R2-2104550/R4-2107620) on UE intra-band and inter-band (NG) EN-DC/NE-DC UE capabilities

**Decision:** The document was **not treated**.

**R4-2109687 Reply LS on the Intra-band and Inter-band (NG)EN-DC/NE-DC Capabilities**

*Type: LS out For: Discussion  
 to RAN2, cc RAN1  
 Source: vivo*

**Decision:** The document was **not treated**.

**R4-2111450 draft reply LS on Intra-band and Inter-band (NG)EN-DC NE-DC Capabilities**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2110597 TP to TR 38.921: MR/LA BS UEM requirements**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**Simultaneous Rx/Tx capabilities and Rel-15 reply LS**

**Refer to Email discussion summary of [99-e][134] Simultaneous\_RxTx.**

**Topic #2: Reply LS to RAN2 on simultaneous Rx/Tx**

**R4-2109575 Draft Reply LS on simultaneous Rx/Tx capability**

*Type: LS out For: Approval  
 to RAN2  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110164 Discussion and draft reply LS on simultaneous Rx/Tx capability**

*Type: discussion For: Decision  
 Source: Apple*

**Decision:** The document was **not treated**.

**Topic #3: CR for simultaneous Rx/Tx**

R4-2110932~934 are moved from AI 4.1.2.1 to AI 13.2

**R4-2110932 R15 CR on** **simultaneous Tx-Rx for CA**

*Type: CR For: Agreement  
 38.101-1 v15.13.0 CR-0828 rev Cat: F (Rel-15)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110933 R16 mirror CR on simultaneous Tx-Rx for CA**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0829 rev Cat: A (Rel-16)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110934 R17 mirror CR on simultaneous Tx-Rx for CA**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0830 rev Cat: A (Rel-17)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

R4-2110929~931 are moved from AI 4.1.2.3 to AI 13.2

**R4-2110929 R15 CR on simultaneous Tx-Rx for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.13.0 CR-0584 rev Cat: F (Rel-15)  
  
 Source: Guangdong OPPO Mobile Telecom.*

**Decision:** The document was **not treated**.

**R4-2110930 R16 mirror CR on simultaneous Tx-Rx for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.7.0 CR-0585 rev Cat: A (Rel-16)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

**R4-2110931 R17 mirror CR on simultaneous Tx-Rx for EN-DC**

*Type: CR For: Agreement  
 38.101-3 v17.1.0 CR-0586 rev Cat: A (Rel-17)  
  
 Source: OPPO*

**Decision:** The document was **not treated**.

## 14 Revision of the Work Plan

### 14.1 R17 new proposals

#### 14.1.1 Spectrum related

**R4-2109142 Motivation on new WI of intra-band non-contiguous NR-DC using band n77**

*Type: discussion For: (not specified)  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109432 Supporting the 6GHz band in other countries/regions**

*Type: discussion For: Information  
 Source: Apple*

**Abstract:**

For information only. The paper outlines other countries/regions where 6GHz band was opened by local regulators.

**Decision:** The document was **not treated**.

**R4-2109486 LTE/NR spectrum sharing in Band 34/n34**

*Type: other For: Information  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2109487 LTE/NR spectrum sharing in Band 39/n39**

*Type: other For: Information  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2110079 New WID on DC of x bands (x=1,2,3) LTE inter-band CA (xDL/1UL) and 4 bands NR inter-band CA (4DL/1UL)**

*Type: WID new For: Information  
 Source: Huawei,HiSilicon*

**Abstract:**

DC of x bands (x=1,2,3) LTE inter-band CA (xDL/1UL) and 4 bands NR inter-band CA (4DL/1UL)

**Decision:** The document was **not treated**.

#### 14.1.2 Non-spectrum related

**R4-2108725 Motivation for UE EMC enhancement**

*Type: WID new For: Information  
 Source: Xiaomi*

**Decision:** The document was **not treated**.

**R4-2108726 New WID: BS/UE EMC enhancements**

*Type: WID new For: Information  
 Source: Ericsson, Xiaomi*

**Decision:** The document was **not treated**.

**R4-2108947 Motivation for new WI on air-to-ground network for NR**

*Type: WID new For: Information  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2108948 New WID on air-to-ground network for NR**

*Type: WID new For: Information  
 Source: CMCC*

**Decision:** The document was **not treated**.

**R4-2109141 Motivation on defining 8Rx performance requirements for NR**

*Type: discussion For: (not specified)  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

**R4-2109144 Motivation for supporting non-colocated scenarios for band 42 and n77/n78**

*Type: discussion For: (not specified)  
 Source: SoftBank Corp.*

**Decision:** The document was **not treated**.

### 14.2 Others

## 15 Any other business

**Email discussion summary of [99-e][161] US\_n77, AI 15 —James Wang**

**R4-2107687 Email discussion summary for [99-e][161] US\_n77**

*Type: Other For: Information  
 Source: Moderator (Apple)*

**Abstract:**

This contribution provides the summary of email discussion and recommended summary.

**Decision:** The document was **not treated**.

**Discussion papers**

**R4-2109174 Discussion on enabling US 3.45 – 3.55GHz in Band n77**

*Type: discussion For: Approval  
 Source: Mediatek India Technology Pvt.*

**Decision:** The document was **not treated**.

**R4-2109442 Supporting evolving regulation in band n77 for US 3.45 to 3.55 GHz usage**

*Type: discussion For: Approval  
 Source: Apple, Skyworks Solutions Inc., T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2110980 Addition of new spectrum in Band n77 for US**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0833 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110981 Addition of new spectrum in Band n77 for US**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0834 rev Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **not treated**.

**R4-2110979 Enabling usage of Band n77 for US 3.45 – 3.55 GHz**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated, AT&T*

**Decision:** The document was **not treated**.

**R4-2111533 TDD synchronization between bands n48 and n77**

*Type: discussion For: Approval  
 38.104 v CR- rev Cat: (Rel-16)  
  
 Source: CableLabs, Charter Communications, Comcast, Google, Qualcomm and DISH Network*

**Decision:** The document was **not treated**.

**CRs**

38.101-1 CR

**R4-2109443 Addition of 3.45-3.55 GHz and modifiedMPR behavior in Band n77 for the US**

*Type: CR For: Agreement  
 38.101-1 v16.7.0 CR-0775 rev Cat: F (Rel-16)  
  
 Source: Apple, Skyworks Solutions Inc., T-Mobile USA*

**Decision:** The document was **not treated**.

**R4-2109444 Addition of 3.45-3.55 GHz and modifiedMPR behavior in Band n77 for the US**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0776 rev Cat: A (Rel-17)  
  
 Source: Apple, Skyworks Solutions Inc., T-Mobile USA*

**Decision:** The document was **not treated**.

38.104 CR

**R4-2109393 CR to TS 38.104: Additional of FCC emission limits on US 3.45-3.55 GHz band**

*Type: CR For: Agreement  
 38.104 v16.7.0 CR-0308 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Specify the FCC emission limits in US 3.45-3.55 GHz band as additional regional operating band unwanted emissions requirements for Band n77.

**Decision:** The document was **not treated**.

**R4-2109394 CR to TS 38.104: Additional of FCC emission limits on US 3.45-3.55 GHz band**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0309 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Specify the FCC emission limits in US 3.45-3.55 GHz band as additional regional operating band unwanted emissions requirements for Band n77.

**Decision:** The document was **not treated**.

**R4-2111536 CR to TS 38.104: adding a note on inter-band TDD synchronization between n48 and n77**

*Type: CR For: Agreement  
 38.104 v16.7.0 CR-0337 rev Cat: B (Rel-16)  
  
 Source: CableLabs*

**Decision:** The document was **not treated**.

38.141-1 CR

**R4-2109395 CR to TS 38.141-1: Additional of FCC emission limits on US 3.45-3.55 GHz band**

*Type: CR For: Agreement  
 38.141-1 v16.7.0 CR-0206 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Specify the FCC emission limits in US 3.45-3.55 GHz band as additional regional operating band unwanted emissions requirements for Band n77.

**Decision:** The document was **not treated**.

**R4-2109396 CR to TS 38.141-1: Additional of FCC emission limits on US 3.45-3.55 GHz band**

*Type: CR For: Agreement  
 38.141-1 v17.1.0 CR-0207 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Specify the FCC emission limits in US 3.45-3.55 GHz band as additional regional operating band unwanted emissions requirements for Band n77.

**Decision:** The document was **not treated**.

**R4-2111066 Draft CR to TS 38.104: adding a note on inter-band TDD synchronization between n48 and n77**

*Type: draftCR For: Endorsement  
 38.104 v16.7.0 CR- rev Cat: B (Rel-16)  
  
 Source: CableLabs, Charter Communications, Comcast, Google, Qualcomm, DISH Network*

**Decision:** The document was **withdrawn**.

**R4-2111068 TDD synchronization between bands n48 and n77**

*Type: discussion For: Approval  
 Source: CableLabs, Charter Communications, Comcast, Google, Qualcomm, DISH Network*

**Decision:** The document was **withdrawn**.

**R4-2111531 CR to TS 38.104: adding a note on inter-band TDD synchronization between n48 and n77**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0336 rev Cat: B (Rel-17)  
  
 Source: CableLabs, Charter Communications, Comcast, Google, Qualcomm, DISH Network*

**Decision:** The document was **withdrawn**.

**Refer to Email discussion summary of [99-e][151] FS\_BC\_handling**

**CR related to band combination simplification**

**R4-2109529 Optimization to channel bandwidth per operating band**

*Type: discussion For: Approval  
 Source: ZTE Corporation*

**Abstract:**

In this paper, we discuss the optimization to channel bandwidth per operating band in Rel-17.

**Decision:** The document was **not treated**.

**R4-2109530 CR to TS 38.101-1 on UE channel bandwidth per operating band**

*Type: CR For: Agreement  
 38.101-1 v17.1.0 CR-0781 rev Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Abstract:**

In this paper, we discuss the optimization on UE channel bandwidth per operating band in 38.101-1.

**Decision:** The document was **not treated**.

**R4-2109531 CR to TS 38.101-2 on UE channel bandwidth per operating band**

*Type: CR For: Agreement  
 38.101-2 v17.1.0 CR-0370 rev Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Abstract:**

In this paper, we discuss the optimization on UE channel bandwidth per operating band in 38.101-2.

**Decision:** The document was **not treated**.

**R4-2109532 CR to TS 38.104 on BS channel bandwidth per operating band**

*Type: CR For: Agreement  
 38.104 v17.1.0 CR-0310 rev Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Abstract:**

In this paper, we discuss the optimization on BS channel bandwidth per operating band in 38.104.

**Decision:** The document was **not treated**.

## 16 Close of the E-meeting

Report prepared by: MCC