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

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

**Electronic Meeting, 24/02/2020 to 06/03/2020**

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## 1 Opening of the E-meeting

## 2 Approval of the agenda

**R4-2000000 Agenda for RAN4#94-e**

*Type: agenda For: Approval  
 Source: RAN4 Chairman*

**Discussion:**

.

**Decision:** The document was **revised to R4-2002162**.

**R4-2002162 Agenda for RAN4#94-e**

*Type: agenda For: Approval  
 Source: Futurewei*

(Replaces R4-2000000)

**Discussion:**

.

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

## 3 Letters / reports from other groups / meetings

**R4-2000001 E-meeting arrangements and guidelines**

*Type: other For: Approval  
 Source: RAN4 Chairman*

**Discussion:**

.

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

**R4-2000002 RAN4#93 Meeting Report**

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

**Discussion:**

.

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

**R4-2002764 Reply LS on CSI-RS measurement outside DRX active time**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913462, to RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002765 LS on agreements related to NR Positionin**

*Type: LS in For: Decision  
 Original outgoing LS: R1-1913522, to RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002766 LS on XDD-FRX Differentiation**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913579, to -, cc -  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002767 LS on NR Rel-16 TEI**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913580, to RAN4, cc -  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002768 Reply LS to RAN1&4 on UE capabilities on DAPS HO**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913581, to RAN2, cc RAN4  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002769 Reply LS on Tx switching between two uplink carriers**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913585, to RAN4, cc RAN2  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002770 Reply LS on uplink TDM pattern for LTE DAPS based enhanced make-before-break HO**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913686, to RAN2, cc RAN3, RAN4  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002771 Reply LS on sidelink synchronization under multiple synchronization sources with different timing**

*Type: LS in For: Information  
 Original outgoing LS: R1-1913696, to RAN1, cc RAN2, RAN4  
 Source: RAN1*

**Discussion:**

.

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

**R4-2002772 LS on Conditional PSCell addition/change**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916330, to RAN3, cc RAN4, RAN  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002773 LS on CLI measurements UE capabilities**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916348, to RAN1, cc RAN4  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002774 LS on RRM Measurement Relaxation for UE Power Saving in NR**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916375, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002775 Reply LS on UL-SL prioritization**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916468, to RAN1, RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002776 LS on MDT Measurements**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916588, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002777 LS on measurement reporting criteria for EN-DC**

*Type: LS in For: Decision  
 Original outgoing LS: R2-1916595, to RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002778 LS on secondary DRX group**

*Type: LS in For: Decision  
 Original outgoing LS: R2-1916597, to RAN1, RAN4, cc -  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002779 LS on inter-RAT HO from SA to EN-DC**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916600, to RAN3, RAN4, cc SA2, CT1  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002780 LS on RAN2 progress on SCell uplink behaviour of the UE in dormancy**

*Type: LS in For: Information  
 Original outgoing LS: R2-1916601, to RAN1, cc RAN4  
 Source: RAN2*

**Discussion:**

.

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

**R4-2002781 LS Response to “Liaison Statement on CCSA progress on NR FR1 OTA”**

*Type: LS in For: Information  
 Original outgoing LS: -, to -, cc RAN4  
 Source: CTI OTA CA Task Force*

**Discussion:**

.

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

**R4-2002782 Reply LS on 5G-NR FR2 Transmitter & Receiver Testability Issues**

*Type: LS in For: Information  
 Original outgoing LS: -, to RAN, cc RAN4, RAN5  
 Source: MSG TFES*

**Discussion:**

.

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

## 6 Rel15 New radio access technology [NR\_newRAT]

**R4-2000524 38.307 CR power class**

*Type: CR For: Agreement  
 38.307 v16.1.0 CR-0016 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000557 38.307 CR power class REL-15**

*Type: CR For: Agreement  
 38.307 v15.4.0 CR-0017 Cat: B (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

### 6.1 Requirements for NE-DC (option 4) and NGEN-DC Maintenance [NR\_newRAT-Core]

#### 6.1.1 RF requirements (38.101-3) [NR-newRAT-Core]

**R4-2001227 CR on correction of 38.101-3 NEDC Ppowerclass (Rel-15)**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0198 Cat: F (Rel-15)  
  
 Source: OPPO*

**Discussion:**

.

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

**R4-2001228 CR on correction of 38.101-3 NEDC Ppowerclass (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0199 Cat: A (Rel-16)  
  
 Source: OPPO*

**Discussion:**

.

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

### 6.2 NR-NR Dual Connectivity Maintenance [NR\_newRAT-Core]

#### 6.2.1 UE RF requirements for DC combinations for FR1+FR2 (38.101-3) [NR\_newRAT-Core]

### 6.3 System Parameters Maintenance [NR\_newRAT-Core]

#### 6.3.1 Channel bandwidth Maintenance [NR\_newRAT-Core]

#### 6.3.2 Channel Arrangement Maintenance [NR\_newRAT-Core]

**R4-2000193 Add 30KHz SCS for n40 SSB**

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

**Abstract:**

In this paper we would like to raise that issue for n40 SSB SCS configuration and provide a number of candidate solutions for discussion. According to our survey, it seems that the deployment and implementation of device for n40 are in the very initial st

**Discussion:**

.

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

**R4-2000194 TS38.101-1 CR: adding 30KHz SSB SCS for n40**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0192 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Add 30KHz SSB SCS for n40

**Discussion:**

.

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

**R4-2000195 TS38.101-1 CR: adding 30KHz SSB SCS for n40 (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0193 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Cat A CR. Add 30KHz SSB SCS for n40.

**Discussion:**

.

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

**R4-2000196 TS38.101-1 CR: adding 30KHz SSB SCS for n40 (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0194 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Cat A CR. Add 30KHz SSB SCS for n40.

**Discussion:**

.

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

**R4-2000489 CR to TS 38.101-3: Correct the intra-band ENDC channel spacing**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0176 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000490 CR to TS 38.101-3: Correct the intra-band ENDC channel spacing**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0177 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2001783 CR for 38.101-1 channel space for CA\_Rel15**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0270 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001784 CR for 38.101-1 channel space for CA\_Rel16**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0271 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001785 CR for 38.101-2 channel space for CA\_Rel15**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0129 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001786 CR for 38.101-2 channel space for CA\_Rel16**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0130 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 6.3.3 Other system parameters maintenance [NR\_newRAT-Core]

**R4-2002144 FR2 ACLR Measurement Bandwidth Definition**

*Type: other For: Discussion  
 38.101-2 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

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

### 6.4 SUL and LTE-NR co-existence maintenance [NR\_newRAT-Core]

**R4-2001697 CR to 38.101-3 R15 to remove FDM ULSUP combinations**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0210 Cat: F (Rel-15)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

There is no specified MPR, AMPR or MSD requirement for FDM SUl operation, ULSUP FDM combinations are thus incomplete and must be removed from the specification. There is no operator behind thos combinations.

**Discussion:**

.

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

**R4-2001716 CR to 38.101-3 R16 to remove FDM ULSUP combinations**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0211 Cat: F (Rel-16)  
  
 Source: Skyworks Solutions Inc.*

**Abstract:**

Mirror R16 CR to remove FDM mode of ULSUPcombinations that do not have proper MPR/AMPR and REFSENS specification

**Discussion:**

.

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

### 6.5 UE RF requirements maintenance [NR\_newRAT]

**R4-2000220 Necessity of signaling supported NS values**

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

**Abstract:**

RAN4#93 discussed a necessity of signaling to convey all the supported NS values by UEs if a new NS is added to an existing “legacy” band. This contribution clarifies expected issues without the signaling and provide solutions. In short, very similar issu

**Discussion:**

.

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

**R4-2000221 Broadening a definition of “modifiedMPR-Behaviour” for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0197 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

This CR is to broaden a definition of “modifiedMPR-Behaviour” in RAN4 specifications in a way that a new bit is defined when MPR or A-MPR for the existing NS is modified or a new NS is added to an existing band.

**Discussion:**

.

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

**R4-2000222 Broadening a definition of “modifiedMPR-Behaviour” for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0198 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A category A CR of R4-2000221.

**Discussion:**

.

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

**R4-2000223 Broadening a definition of “modifiedMPR-Behaviour” for 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0092 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

This CR is to broaden a definition of “modifiedMPR-Behaviour” in RAN4 specifications in a way that a new bit is defined when MPR or A-MPR for the existing NS is modified or a new NS is added to an existing band.

**Discussion:**

.

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

**R4-2000224 Broadening a definition of “modifiedMPR-Behaviour” for 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0093 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A Cat A CR of R4-2000223.

**Discussion:**

.

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

**R4-2000225 Broadening a definition of “modifiedMPR-Behaviour” for 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0161 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

This CR is to broaden a definition of “modifiedMPR-Behaviour” in RAN4 specifications in a way that a new bit is defined when MPR or A-MPR for the existing NS is modified or a new NS is added to an existing band.

**Discussion:**

.

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

**R4-2000226 Broadening a definition of “modifiedMPR-Behaviour” for 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0162 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A Cat A CR of R4-2000225.

**Discussion:**

.

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

#### 6.5.1 Draft CR for editorial errors only [NR\_newRAT-Core]

##### 6.5.1.1 Draft CR for 38.101-1 for editorial errors only [NR\_newRAT-Core]

**R4-2000119 CR to 38.101-1 UL MIMO MPR reference table**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0188 Cat: F (Rel-15)  
  
 Source: vivo*

**Discussion:**

.

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

**R4-2000120 CR to 38.101-1 UL MIMO MPR reference table**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0189 Cat: A (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

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

**R4-2000594 CR for TS38.101-1, Remove notes for UE channel bandwidth**

*Type: CR For: Agreement  
 38.101-1 v15.8.0 CR-0228 Cat: F (Rel-15)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000595 CR for TS38.101-1, Remove notes for UE channel bandwidth**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0229 Cat: A (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000596 CR for TS38.101-1, Correction of IE RF-Parameters name of maxUplinkDutyCycle**

*Type: CR For: Agreement  
 38.101-1 v15.8.0 CR-0230 Cat: F (Rel-15)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000597 CR for TS38.101-1, Correction of IE RF-Parameters name of maxUplinkDutyCycle**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0231 Cat: A (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000598 CR for TS38.101-3, Correction of IE RF-Parameters name of maxUplinkDutyCycle**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0182 Cat: F (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000743 CR for TS 38.101-1: Editorial addition of CBW definition in Abbreviations section**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0237 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

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

**R4-2000744 CR for TS 38.101-1: Editorial addition of CBW definition in Abbreviations section**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0238 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

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

**R4-2002146 Removal of unnecessary definition of offsetmax,IMD3 from Table 6.2.3.2-1**

*Type: draftCR For: Endorsement  
 38.101-1 v15.8.2  
 Source: Motorola Mobility España SA*

**Abstract:**

The symbol offsetmax,IMD3 is not referenced outside of Table 6.2.3.2-1 and is not needed. The symbol can be replaced by its value and the row removed.

**Discussion:**

.

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

**R4-2002148 Removal of unnecessary definition of offsetmax,IMD3 from Table 6.2.3.2-1**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0277 Cat: D (Rel-15)  
  
 Source: Motorola Mobility España SA*

**Abstract:**

The symbol offsetmax,IMD3 is not referenced outside of Table 6.2.3.2-1 and is not needed. The symbol can be replaced by its value and the row removed.

**Discussion:**

.

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

##### 6.5.1.2 Draft CR for 38.101-2 for editorial errors only [NR\_newRAT-Core]

**R4-2000397 CR to 38.101-2 (Rel-15) MPR for CA**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0098 Cat: F (Rel-15)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000398 CR to 38.101-2 (Rel-16) MPR for CA**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0099 Cat: A (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000695 CR to 38.101-2: Align Rx CA requirements structure with TS38.101-1**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0109 Cat: D (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Change subsection organization in sections 7.xA to mirror that in TS38.101-1 for future compatibility

**Discussion:**

.

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

**R4-2000696 CR to 38.101-2: Align Rx CA requirements structure with TS38.101-1**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0110 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Change subsection organization in sections 7.xA to mirror that in TS38.101-1 for future compatibility

**Discussion:**

.

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

**R4-2000745 CR for TS 38.101-2: Editorial addition of CBW and CABW definitions in Abbreviations section**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0113 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

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

**R4-2000746 CR for TS 38.101-2: Editorial addition of CBW and CABW definitions in Abbreviations section**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0114 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

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

**R4-2000912 CR to TS 38.101-2 Correction on FRC table for FR2 DL 64QAM(R15)**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0117 Cat: F (Rel-15)  
  
 Source: China Telecom*

**Abstract:**

This CR is to change the numberof TDD Slot in mod(i, 10) from 10 to 5

**Discussion:**

.

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

**R4-2000913 CR to TS 38.101-2 Correction on FRC table for FR2 DL 64QAM(R16)**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0118 Cat: A (Rel-16)  
  
 Source: China Telecom*

**Abstract:**

This CR is to change the numberof TDD Slot in mod(i, 10) from 10 to 5

**Discussion:**

.

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

##### 6.5.1.3 Draft CR for 38.101-3 for editorial errors only [NR\_newRAT-Core]

**R4-2000453 CR to TS 38.101-3: editorial corrections on Rx requirements for intra-band contiguous EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0173 Cat: D (Rel-15)  
  
 Source: Xiaomi*

**Abstract:**

In section 6.2B.4, PCMAX\_L,f,c,NR and PCMAX\_L\_E-TURA,c are defined for NR carrier and LTE carrier respectively, rather than PCMAX\_L,f,c and PCMAX\_L. Thus, PCMAX\_L,f,c and PCMAX\_L in the notes of RX requirements tables are not correct.

**Discussion:**

.

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

**R4-2000454 CR to TS 38.101-3: editorial corrections on Rx requirements for intra-band contiguous EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0174 Cat: A (Rel-16)  
  
 Source: Xiaomi*

**Abstract:**

In section 6.2B.4, PCMAX\_L,f,c,NR and PCMAX\_L\_E-TURA,c are defined for NR carrier and LTE carrier respectively, rather than PCMAX\_L,f,c and PCMAX\_L. Thus, PCMAX\_L,f,c and PCMAX\_L in the notes of RX requirements tables are not correct.

**Discussion:**

.

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

**R4-2000892 CR to TS 38.101-3: editorial correction for output power dynamics for intra-band EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0192 Cat: F (Rel-15)  
  
 Source: CHTTL*

**Discussion:**

.

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

**R4-2000893 CR to TS 38.101-3: editorial correction for output power dynamics for intra-band EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0193 Cat: A (Rel-16)  
  
 Source: CHTTL*

**Discussion:**

.

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

**R4-2002098 EN-DC configuration table corrections**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0216 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2002099 EN-DC configuration table corrections**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0217 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

#### 6.5.2 DC combination including NR carrier and/or NR CA combination maintenance [NR\_newRAT-Core]

##### 6.5.2.1 Maintenance for bands and band combinations for 38.101-1 [NR\_newRAT-Core]

**R4-2000413 CR for 38.101-1: n41 and n25 corrections**

*Type: CR For: Agreement  
 38.101-1 v15.8.1 CR-0209 Cat: F (Rel-15)  
  
 Source: Sprint Corporation*

**Discussion:**

.

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

**R4-2000414 Mirror CR for 38.101-1: n41 and n25 corrections**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0210 Cat: A (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

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

**R4-2000525 Correction of NR CA bandwidth classe B and F**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0225 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001069 CR for 38.101-1: removing the fallback group for NR CA configuration (Rel-15)**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0243 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001070 CR for 38.101-1: removing the fallback group for NR CA configuration (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0244 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001308 Introduction of the Annex modifiedMPR-Behaviour into the NR SA specification**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0253 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) into the specification of standalone operation.

**Discussion:**

.

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

**R4-2001309 Introduction of the Annex modifiedMPR-Behaviour into the NR SA specification**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0254 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) into the specification of standalone operation. Unlike in the Rel-15 version, the bits shall be set to 'one' in Rel-16.

**Discussion:**

.

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

##### 6.5.2.2 Maintenance for combinations for 38.101-2 [NR\_newRAT-Core]

**R4-2000521 CR FR2 CA tables REL15**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0105 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000523 CR FR2 CA tables REL16**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0106 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000559 CR to TS 38.101-2 on corrections to intra-band contiguous CA for FR2 bands (Rel-15)**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0107 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-2 on corrections to intra-band contiguous CA for FR2 bands (Rel-15)

**Discussion:**

.

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

**R4-2000562 CR to TS 38.101-2 on corrections to intra-band contiguous CA for FR2 bands (Rel-16)**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0108 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-2 on corrections to intra-band contiguous CA for FR2 bands (Rel-16)

**Discussion:**

.

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

**R4-2001310 Removal of contradicting fall-back specification for intra-band non-contigous CA/DC**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0119 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to remove a contradicting fallback specification for inter-band non-contigous CA/DC within FR2

**Discussion:**

.

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

**R4-2001311 Removal of contradicting fall-back specification for intra-band non-contigous CA/DC**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0120 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to remove a contradicting fallback specification for inter-band non-contigous CA/DC within FR2

**Discussion:**

.

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

##### 6.5.2.3 Maintenance for combinations for 38.101-3 [NR\_newRAT-Core]

**R4-2000410 CR for 38.101-3: Correction of MOP tolerance for B41/n41 EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0163 Cat: F (Rel-15)  
  
 Source: Sprint Corporation*

**Discussion:**

.

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

**R4-2000411 Mirror CR for 38.101-3: Correction of MOP tolerance for B41/n41 EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0164 Cat: A (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

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

**R4-2000854 CR to introduce new BCS of intra-band continuous EN-DC for TS 38.101-3(Rel-15)**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0188 Cat: B (Rel-15)  
  
 Source: KDDI Corporation*

**Discussion:**

.

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

**R4-2001312 Removal of contradicting fall-back specification for intra-band non-contigous CA/DC**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0201 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to remove a contradicting fallback specification for inter-band non-contigous CA/DC including FR2

**Discussion:**

.

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

**R4-2001313 Removal of contradicting fall-back specification for intra-band non-contigous CA/DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0202 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to remove a contradicting fallback specification for inter-band non-contigous CA/DC including FR2

**Discussion:**

.

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

**R4-2001314 Removal of the Annex modifiedMPR-Behaviour from the NSA specification**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0203 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to remove the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) from the specification of non-standalone operation.

**Discussion:**

.

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

**R4-2001315 Removal of the Annex modifiedMPR-Behaviour from the NSA specification**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0204 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to remove the Annex on modifiedMPRbehaviour (band specific and indicated in the UE-NR-Capability) from the specification of non-standalone operation.

**Discussion:**

.

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

**R4-2002118 CR for [agreed] asynchronous operation for NR CA n78-n79**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0274 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO INC.*

**Abstract:**

Re-submission of already agreed CR R4-1915529 in RAN4#93

**Discussion:**

.

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

**R4-2002119 CR for [agreed] asynchronous operation for NR CA n78-n79**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0275 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Abstract:**

Re-submission of already agreed CR R4-1915530 in RAN4#93

**Discussion:**

.

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

#### 6.5.3 [FR1] Tx and Rx common [NR\_newRAT-Core]

**R4-2000491 CR to TS 38.101-1: Replace CBW with symbols defined in the specification.**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0220 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000492 CR to TS 38.101-1: Replace CBW with symbols defined in the specification.**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0221 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2001767 CR for inter-band CA Tx requirement\_Rel-15**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0264 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001768 CR for inter-band CA Tx requirement\_Rel-16**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0265 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001769 CR for inter-band ENDC Tx requirement\_Rel-15**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0212 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001770 CR for inter-band ENDC Tx requirement\_Rel-16**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0213 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 6.5.4 [FR1] Transmitter characteristics [NR\_newRAT-Core]

##### 6.5.4.1 EN-DC power class and UL MIMO clarifications [NR\_newRAT-Core]

**R4-2000063 Clarification of Power Class related features**

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

**Abstract:**

This contributin dicusses a necessity of indication of supported power class per feature.

**Discussion:**

.

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

**R4-2000117 CR to 38.101-1 clarification of MIMO power class in R15**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0187 Cat: F (Rel-15)  
  
 Source: vivo*

**Discussion:**

.

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

**R4-2000118 draft LS on clarification of EN-DC power class in R15**

*Type: LS out For: Approval  
 to RAN5  
 Source: vivo*

**Discussion:**

.

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

**R4-2001229 Further on UL MIMO PC2 fallback**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

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

**R4-2001316 Correction of transmitter characteristics for UL-MIMO: powerclass 2 and fallback**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0255 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the maximum output power requirements for UL-MIMO and the fallback requirement for all UL-MIMO transmitter characteristics

**Discussion:**

.

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

**R4-2001317 Correction of transmitter characteristics for UL-MIMO: powerclass 2 and fallback**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0256 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to correct the maximum output power requirements for UL-MIMO and the fallback requirement for all UL-MIMO transmitter characteristics

**Discussion:**

.

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

**R4-2002037 On UL MIMO requirements**

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

**Discussion:**

.

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

**R4-2002038 On EN-DC power class**

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

**Discussion:**

.

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

**R4-2002050 draft LS on serving cell number for EN-DC power class**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2002141 Draft LS on EN-DC power class**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.5.4.2 UE additional maximum output power reduction (A-MPR) [NR\_newRAT-Core]

**R4-2000326 CR to TS 38.101-1 on corrections to network signalling value (Rel-15)**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0202 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-1 on corrections to network signalling value (Rel-15)

**Discussion:**

.

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

**R4-2000327 CR to TS 38.101-1 on corrections to network signalling value (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0203 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-1 on corrections to network signalling value (Rel-16)

**Discussion:**

.

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

**R4-2000400 CR for 38.101- n39 NS flag change due to conflict**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0207 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Change NS\_flag

**Discussion:**

.

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

**R4-2000401 CR for 38.101- n39 NS flag change due to conflict**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0208 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Mirror CR

**Discussion:**

.

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

##### 6.5.4.3 Configured transmitted power [NR\_newRAT-Core]

**R4-2000227 Avoidance of redundant power reduction for HPUE**

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

**Abstract:**

A contribution of R4-1915370 in RAN4#93 pointed out that there is a case where the current specification allows more than or equal to 3 dB power reduction such as MPR and PC3 fallback to be applicable simultaneously. This allows the UE to use unnecessary

**Discussion:**

.

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

**R4-2000228 Avoidance of redundant power reduction for HPUE for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0199 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A CR based on a companion discussion paper of R4-2000227.

**Discussion:**

.

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

**R4-2000229 Avoidance of redundant power reduction for HPUE for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0200 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A Cat A CR of R4-2000228.

**Discussion:**

.

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

**R4-2000455 Consideration on high power UE fall back enhancement**

*Type: other For: Approval  
 Source: Xiaomi*

**Discussion:**

.

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

**R4-2002158 CR for power class fallback enhancement**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0278 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.5.4.4 Tx DC location [NR\_newRAT-Core]

##### 6.5.4.5 Other Tx requirements [NR\_newRAT-Core]

**R4-2000204 FR1 TX EVM test condition correction for ULMIMO**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We use simulation to show MIMO receivers can deal with crosstalk more gracefully than noise. We propose RAN4 test should take that characterisitc into consideration

**Discussion:**

.

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

**R4-2000205 CR to 38.101-1: Revision to ULMIMO EVM spec**

*Type: CR For: Agreement  
 38.101-1 v15.8.0 CR-0195 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

RAN4 EVM requierment in V15.8 treats layer crosstalk as uncorrelated noise. RAN4 requiement ends up placing unnecessary burden on UE design.

**Discussion:**

.

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

**R4-2000206 CR to 38.101-1: Revision to ULMIMO EVM spec**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0196 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

RAN4 EVM requierment in V15.8 treats layer crosstalk as uncorrelated noise. RAN4 requiement ends up placing unnecessary burden on UE design.

**Discussion:**

.

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

**R4-2000354 Correction on UL MIMO Emission requirements and alignment with RAN1 terminology**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0205 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

**R4-2000355 Correction on UL MIMO Emission requirements and alignment with RAN1 terminology**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0206 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

**R4-2000356 Correction on UL MIMO Emission requirements and alignment with RAN1 terminology**

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

**Discussion:**

.

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

**R4-2000795 On the condition of antenna configuration for UL-MIMO in FR1**

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

**Discussion:**

.

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

**R4-2000959 On correction of UE co-ex tables for Japan**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: SoftBank Corp., NTT docomo INC., KDDI Corporation*

**Abstract:**

This paper is to explain corrections to be made for Japan related UE co-ex requirements and collect group's views on some aspects.

**Discussion:**

.

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

#### 6.5.5 [FR1] Receiver characteristics [NR\_newRAT-Core]

##### 6.5.5.1 Out of band blocking exceptions [NR\_newRAT-Core]

##### 6.5.5.2 Other Rx requirements [NR\_newRAT-Core]

**R4-2000439 Testability issue with OoBB for FR1 EN-DC UE**

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

**Abstract:**

In this contribution we point out a testability issue with the out-of-band blocking (OoBB) requirement for FR1 EN-DC UE.

Associated CR : R4-2000440/0441

**Discussion:**

.

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

**R4-2000440 CR to out-of-band blocking for DC in FR1**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0169 Cat: F (Rel-15)  
  
 Source: Anritsu Corporation*

**Abstract:**

Change uplink carrier output power whose downlink is being tested to reduce the too much power imbalance between E-UTRA and NR.

Associated discussion paper : R4-2000439

**Discussion:**

.

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

**R4-2000441 CR to out-of-band blocking for DC in FR1**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0170 Cat: A (Rel-16)  
  
 Source: Anritsu Corporation*

**Abstract:**

Change uplink carrier output power whose downlink is being tested to reduce the too much power imbalance between E-UTRA and NR.

Associated discussion paper : R4-2000439

**Discussion:**

.

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

**R4-2000449 CR to TS 38.101-1: corrections on ACS for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v15.8.2 CR-0217 Cat: F (Rel-15)  
  
 Source: Xiaomi*

**Abstract:**

For ACS case 2, the transmitter shall be set to 24 dB below PCMAX\_L,f,c rather than 4 dB.

**Discussion:**

.

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

**R4-2000450 CR to TS 38.101-1: corrections on ACS for intra-band contiguous CA**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0218 Cat: A (Rel-16)  
  
 Source: Xiaomi*

**Abstract:**

For ACS case 2, the transmitter shall be set to 24 dB below PCMAX\_L,f,c rather than 4 dB.

**Discussion:**

.

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

**R4-2000451 CR to TS 38.101-3: corrections on ACS for intra-band contiguous EN-DC**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0171 Cat: F (Rel-15)  
  
 Source: Xiaomi*

**Abstract:**

For ACS case 2, the transmitter shall be set to 24 dB below PCMAX\_L,f,c rather than 4 dB.

**Discussion:**

.

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

**R4-2000452 CR to TS 38.101-3: corrections on ACS for intra-band contiguous EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0172 Cat: A (Rel-16)  
  
 Source: Xiaomi*

**Abstract:**

For ACS case 2, the transmitter shall be set to 24 dB below PCMAX\_L,f,c rather than 4 dB.

**Discussion:**

.

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

**R4-2000747 NR UE receiver ACS test requirements**

*Type: other For: Approval  
 38.101-1 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we raise the concern in current NR ACS test requirements and propose to modify the ACS DL reference measurement channel test configuration.

**Discussion:**

.

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

**R4-2000748 LS on NR UE receiver ACS test requirements**

*Type: LS out For: Approval  
 to RAN WG5  
 Source: MediaTek Inc.*

**Discussion:**

.

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

#### 6.5.6 [FR2] Common to Tx and Rx [NR\_newRAT-Core]

**R4-2000198 CR to 38.101-2 to correct Link and Meas Angles**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0085 Cat: F (Rel-15)  
  
 Source: Keysight Technologies UK Ltd*

**Discussion:**

.

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

**R4-2000200 On LS from RAN5 on multi-band relaxations**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

In this contribution we analyse RAN5’s problem description and evaluate RAN5’s suggested solutions to streamline the MBR framework

**Discussion:**

.

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

**R4-2000201 Reply to LS R5-199424 on FR2 Multiband Relaxations**

*Type: LS out For: Approval  
 to RAN5  
 Source: Qualcomm Incorporated*

**Abstract:**

Reply LS to R5-199424

**Discussion:**

.

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

**R4-2000202 CR to 38.101-2: Revision to Multiband Relaxations**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0086 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Revised MBR proposal to address RAN5 concern via LS (R5-199424) that MBR from v15.8 is not feasible to implement.

**Discussion:**

.

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

**R4-2000203 CR to 38.101-2: Revision to Multiband Relaxations**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0087 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Revised MBR proposal because RAN5 has informed via LS (R5-199424) that MBR from v15.8 is not feasible to implement.

**Discussion:**

.

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

**R4-2000526 Discussion on RAN5 LS on Multiband relaxation for FR2**

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

**Discussion:**

.

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

**R4-2001780 clarification on beam lock function for Tx RF requirement measurement**

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

**Discussion:**

.

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

##### 6.5.6.1 Regulatory Tx/Rx spurious emission limits handling [NR\_newRAT-Core]

**R4-2000091 On 3GPP band n258 and WRC-19 EESS unwanted emission limits**

*Type: other For: Discussion  
 Source: T-Mobile USA, AT&T*

**Abstract:**

The proponents believe that RAN4 should revise current band n258 specifications to implement WRC-19 agreed phase-1 EESS limits only for now, and leave phase-2 limits for a future revision, when applicable.

**Discussion:**

.

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

**R4-2000212 CR to 38.101-2: A-MPR Corrections**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0088 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Removal of -8dBm/200 MHz general requirement duplicated in error from general requirements

**Discussion:**

.

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

**R4-2000213 CR to 38.101-2: A-MPR Corrections**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0089 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Removal of -8dBm/200 MHz general requirement duplicated in error from general requirements

**Discussion:**

.

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

**R4-2000214 Impact of EN 301 908-25 on FR2**

*Type: other For: Discussion  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

The ETSI harmonized standard EN 301 908-25 includes both, n257 and n258 as allowed deployment scenariso in the EU. Because of 3GPP limitation of NS\_201/MS\_202 to n258, UEs that attach as n257 devices in EU networks will not know to protect the lower EES

**Discussion:**

.

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

**R4-2000215 dCR to 38.101-2: NS extension to n257**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0090 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

visualize necessary changes to NS\_201 and NS\_202 framework to make 3GPP standard consistent with projected EU harmonized standard

**Discussion:**

.

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

**R4-2000216 Impact of WRC19 resolutions on FR2**

*Type: other For: Discussion  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

WRC19 resolutions analyzed, 3GPP standards impact projected

**Discussion:**

.

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

**R4-2000217 dCR to 38.101-2: Visualizing A-MPR from WRC19 Resolutions**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0091 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

Example implementation of AMPRs in 3GPP to stay compliant with emissions recommendations in WRC19.

**Discussion:**

.

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

**R4-2000218 dCR to 38.101-2: NS extension to n257**

*Type: draftCR For: Endorsement  
 38.101-2 v15.8.0  
 Source: Qualcomm Incorporated*

**Abstract:**

visualize necessary changes to NS\_201 and NS\_202 framework to make 3GPP standard consistent with projected EU harmonized standard

**Discussion:**

.

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

**R4-2000219 dCR to 38.101-2: Visualizing A-MPR from WRC19 Resolutions**

*Type: draftCR For: Endorsement  
 38.101-2 v15.8.0  
 Source: Qualcomm Incorporated*

**Abstract:**

Example implementation of AMPRs in 3GPP to stay compliant with emissions recommendations in WRC19.

**Discussion:**

.

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

**R4-2000409 On 3GPP band n258 and WRC-19 EESS unwanted emission limits**

*Type: other For: Discussion  
 Source: T-Mobile USA, AT&T, U.S. Cellular*

**Abstract:**

The proponents believe that RAN4 should revise current band n258 specifications to implement WRC-19 agreed phase-1 EESS limits only for now, and leave phase-2 limits for a future revision, when applicable.

**Discussion:**

.

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

**R4-2001775 On FR2 EESS protection emission requirement**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 6.5.7 [FR2] Transmitter characteristics [NR\_newRAT-Core]

##### 6.5.7.1 Power control [NR\_newRAT-Core]

**R4-2000107 Pcmax correction for CA**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0084 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

P\_CMAX correction on FR2 CA to align with RAN1 power control assumptions

**Discussion:**

.

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

**R4-2000109 Background for Pcmax correction for CA**

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

**Abstract:**

Explanation what RAN1 spec means and why the language in RAN4 specs for CA is not right. How power control works and why re-calculation is not possible

**Discussion:**

.

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

**R4-2000402 Pcmax correction for CA**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0100 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

**R4-2001387 Correction on transmission gap for FR2 relative power tolerance**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0121 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR

**Discussion:**

.

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

**R4-2001388 Correction on transmission gap for FR2 relative power tolerance**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0122 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR

**Discussion:**

.

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

**R4-2001765 CR for FR2 CA Pcmax\_Rel-15**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0127 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001766 CR for FR2 CA Pcmax\_Rel-16**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0128 Cat: A (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.5.7.2 Beam correspondence [NR\_newRAT-Core]

**R4-2001763 CR for 38.101-2 side condition for BC\_Rel15**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0125 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001764 CR for 38.101-2 side condition for BC\_Rel16**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0126 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.5.7.3 Other Tx requirements [NR\_newRAT-Core]

**R4-2000003 Correction of the FR2 RMC slot patterns for MOP test cases**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0079 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

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

**R4-2000004 Correction of the FR2 RMC slot patterns for MOP test cases**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0080 Cat: A (Rel-16)  
  
 Source: Apple inc.*

**Discussion:**

.

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

**R4-2000005 Clarification for the definition of the UL duty cycle**

*Type: other For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

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

**R4-2000010 Correction of FR2 64QAM UL RMC**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0081 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

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

**R4-2000011 Correction of FR2 64QAM UL RMC**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0082 Cat: A (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

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

**R4-2000084 [draft] LS on clarification for the definition of the UL duty cycle**

*Type: LS out For: Approval  
 to RAN2  
 Source: Apple Inc.*

**Discussion:**

.

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

**R4-2000230 EESS protection from n257**

*Type: other For: Approval  
 38.101-2 v..  
 Source: NTT DOCOMO, INC.*

**Abstract:**

ITU WRC-19 concluded that in order to protect the EESS (passive) in the frequency band 23.6-24 GHz the unwanted emissions of IMT mobile stations operating in the frequency band 24.25-27.5 GHz (Active service band) shall meet -29 dB(W/MHz) until 1st Sep 20

**Discussion:**

.

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

**R4-2000231 Correction of EESS protection from n257**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0094 Cat: F (Rel-15)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A CR based on discussion paper of R4-2000230.

**Discussion:**

.

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

**R4-2000232 Correction of EESS protection from n257**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0095 Cat: A (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Abstract:**

A Cat A CR of R4-2000231.

**Discussion:**

.

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

**R4-2000507 CR to 38.101-2 (Rel-15) Configured transmitted power for CA**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0103 Cat: F (Rel-15)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000508 CR to 38.101-2 (Rel-16) Configured transmitted power for CA**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0104 Cat: A (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

#### 6.5.8 [FR2] Receiver characteristics [NR\_newRAT-Core]

**R4-2000436 Condition of IBB blocker location in FR2**

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

**Abstract:**

In this contribution we revisit a motivation of placing an interferer for in-band blocking (IBB) test repeatedly through a whole range in the corresponding FR2 band.

Associated CR: R4-2000437/0438

**Discussion:**

.

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

**R4-2000437 Correction to in-band interferer offset definition in FR2**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0101 Cat: F (Rel-15)  
  
 Source: Anritsu Corporation*

**Abstract:**

For simplification of test procedure and to reduce a redundancy in FR2 requirement, change the interferer offset definition for IBB.

Associated discussion paper : R4-2000436

**Discussion:**

.

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

**R4-2000438 Correction to in-band interferer offset definition in FR2**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0102 Cat: A (Rel-16)  
  
 Source: Anritsu Corporation*

**Abstract:**

For simplification of test procedure and to reduce a redundancy in FR2 requirement, change the interferer offset definition for IBB.

Associated discussion paper : R4-2000436

**Discussion:**

.

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

**R4-2000697 CR to 38.101-2: Removal of Rx requirement for UE in UL MIMO**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0111 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

UL MIMO makes no special demands of the receiver. So the refsens requirement for the UE when it is configured for UL MIMO is obsolete

**Discussion:**

.

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

**R4-2000698 CR to 38.101-2: Removal of Rx requirement for UE in UL MIMO**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0112 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

UL MIMO makes no special demands of the receiver. So a special refsens requirement for the UE when it is configured for UL MIMO is obsolete

**Discussion:**

.

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

**R4-2000749 CR for TS 38.101-2: Clarifications on transmitter power for recevier requirements**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0115 Cat: F (Rel-15)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

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

**R4-2000752 CR for TS 38.101-2: Clarifications on transmitter power for recevier requirements**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0116 Cat: A (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

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

### 6.6 UE EMC [NR\_newRAT-Core]

### 6.7 BS RF [NR\_newRAT-Core]

#### 6.7.1 General and ad-hoc meeting minutes [NR\_newRAT-Core]

**R4-2001005 CR to TS 38.104: Regional requirements**

*Type: CR For: Agreement  
 38.104 v15.8.0 CR-0141 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Add the OTA receiver spurious emissions requirements for BS type 2-O in the regional requirements table.

**Discussion:**

.

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

**R4-2001006 CR to TS 38.104: Regional requirements**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0142 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Add the OTA receiver spurious emissions requirements for BS type 2-O in the regional requirements table.

**Discussion:**

.

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

**R4-2001007 CR to TS 38.141-2: Regional requirements**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0117 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Add the OTA receiver spurious emissions requirements for BS type 2-O in the regional requirements table.

**Discussion:**

.

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

**R4-2001008 CR to TS 38.141-2: Regional requirements**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0118 Cat: A (Rel-16)  
  
 Source: NEC*

**Abstract:**

Add the OTA receiver spurious emissions requirements for BS type 2-O in the regional requirements table.

**Discussion:**

.

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

#### 6.7.2 Transmitter characteristics maintenance [NR\_newRAT-Core]

**R4-2000891 CR for background on Category B unwanted emission requirement for BS type 2-O**

*Type: CR For: Agreement  
 38.817-02 v15.6.0 CR-0062 Cat: F (Rel-15)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2001191 Additional unwanted emission requirements for the EESS protection from band n257 and n258**

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

**Discussion:**

.

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

**R4-2001241 CR to TS 37.104 channel spacing R15**

*Type: CR For: Agreement  
 37.104 v15.9.0 CR-0895 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

Delete the 30kHz channel raster and change to 30kHz channel raster granularity.

**Discussion:**

.

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

**R4-2001242 CR to TS 37.104 channel spacing R16 catA**

*Type: CR For: Agreement  
 37.104 v16.4.0 CR-0896 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2001243 CR to TS 37.141 channel spacing R15**

*Type: CR For: Agreement  
 37.141 v15.9.0 CR-0925 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

Delete the 30kHz channel raster and change to 30kHz channel raster granularity.

**Discussion:**

.

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

**R4-2001244 CR to TS 37.141 channel spacing R16 catA**

*Type: CR For: Agreement  
 37.141 v16.4.0 CR-0926 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2001245 CR to TS 38.104 editorial correction R16 catA**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0149 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

1,Corrected the BWGB to BWGB,low and BWBG,High for CA bandwidth

2,Corrected the table of 9.4.3.3-1 as the metric lack of “)”

3,Corrected the reference to EISminsens in table 10.6.2.1-1 and 10.6.2.2-1 to clause 10.2.

**Discussion:**

.

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

**R4-2001246 CR to TS 38.104 editorial correction**

*Type: CR For: Agreement  
 38.104 v15.8.0 CR-0150 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2001247 CR to TS 38.104 spurious emission for FR2 R16catA**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0151 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

The TX spurious emission table 9.7.5.3.2.3-2 has been updated with band n257, n260, n261 requirement.

**Discussion:**

.

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

**R4-2001248 CR to TS 38.104 spurious emission for FR2**

*Type: CR For: Agreement  
 38.104 v15.8.0 CR-0152 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2001249 CR to TS 38.817-02 out-of-band blocking boundary**

*Type: CR For: Agreement  
 38.817-02 v15.6.0 CR-0064 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

Added the statement when channel bandwidth is greater than 900MHz.

**Discussion:**

.

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

**R4-2001250 on WRC-19 FR2 emission requirements**

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

**Abstract:**

In this contribution, we give analysis of WRC-19 decision and the observations and proposals are:

Proposal: To capture the WRC-19 requirement in 3GPP specification.

**Discussion:**

.

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

**R4-2001420 CR to 38.817-02: Measurement uncertainty for FR2 OTA additional spurious emissions requirements**

*Type: CR For: Agreement  
 38.817-02 v15.6.0 CR-0065 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

World Radio Conference (WRC-19) has reached an agreement on limits of unwanted emission power in a specified bandwidth with the Earth Exploration Satellite Service (EESS) band. In this CR the measurement uncertainty analysis is captured into the TR.

**Discussion:**

.

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

**R4-2001421 CR to TS 38.104: Additional OTA transmitter spurious emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.104 v15.8.0 CR-0153 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

World Radio Conference (WRC-19) has reached an agreement on limits of unwanted emission power in a specified bandwidth with the Earth Exploration Satellite Service (EESS) band. The emission requirements are introduced in this CR.

**Discussion:**

.

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

**R4-2001422 CR to TS 38.104: Additional OTA transmitter spurious emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0154 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

World Radio Conference (WRC-19) has reached an agreement on limits of unwanted emission power in a specified bandwidth with the Earth Exploration Satellite Service (EESS) band. The emission requirements are introduced in this CR.

**Discussion:**

.

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

**R4-2001423 CR to TS 38.141-2: Additional OTA transmitter spurious emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0123 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

World Radio Conference (WRC-19) has reached an agreement on limits of unwanted emission power in a specified bandwidth with the Earth Exploration Satellite Service (EESS) band. The conformance requirements are introduced in this CR.

**Discussion:**

.

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

**R4-2001424 CR to TS 38.141-2: Additional OTA transmitter spurious emissions requirements for EESS protection**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0124 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

World Radio Conference (WRC-19) has reached an agreement on limits of unwanted emission power in a specified bandwidth with the Earth Exploration Satellite Service (EESS) band. The conformance requirements are introduced in this CR.

**Discussion:**

.

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

**R4-2001686 EESS protection for NR BS operation in Band n257 and n258**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

The document discusses the WRC'19 outcome for EESS protection and makes proposals for how it can be implemented in BS specificaitons.

**Discussion:**

.

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

#### 6.7.3 Receiver characteristics maintenance [NR\_newRAT-Core]

**R4-2000659 CR to TR 38.817-02: Clarifications and corrections on receiver dynamic range and other requirements**

*Type: CR For: Agreement  
 38.817-02 v15.6.0 CR-0061 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) Clarify in clause 7.3 that SCS in the equations for interference level and wanted signal refer to different values.

2) Remove the outdated statements in clause 5.1 that indicate the works on the MSR and AAS BS specifications updates for NR are yet to b

**Discussion:**

.

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

**R4-2000660 CR to TR 38.104: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.104 v15.8.0 CR-0133 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘. Typo are also corrected.

**Discussion:**

.

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

**R4-2000661 CR to TR 38.104: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0134 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘. Typo are also corrected.

**Discussion:**

.

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

**R4-2001004 CR to TR 38.817-02: Clarification on receiver dynamic range requirement**

*Type: CR For: Agreement  
 38.817-02 v15.6.0 CR-0063 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Clarify the SCS for interference level formula and wanted signal formula for the receiver dynamic range requirement.

**Discussion:**

.

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

### 6.8 BS conformance testing [NR\_newRAT-Perf]

#### 6.8.1 General and ad-hoc meeting minutes [NR\_newRAT-Perf]

#### 6.8.2 BS specifications clean-ups (including conformance testing and core) [NR\_newRAT-Perf/Core]

##### 6.8.2.1 eAAS specifications [NR\_newRAT-Perf/Core]

##### 6.8.2.2 MSR specifications [NR\_newRAT-Perf/Core]

**R4-2000898 CR to TS 37.141: Update on Tx transient period definition**

*Type: CR For: Agreement  
 37.141 v15.9.0 CR-0920 Cat: F (Rel-15)  
  
 Source: CMCC*

**Abstract:**

The same illustration figure of the transient period of NR is added in accordance with TS 37.104.

**Discussion:**

.

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

**R4-2000899 CR to TS 37.141: Update on Tx transient period definition**

*Type: CR For: Agreement  
 37.141 v16.4.0 CR-0921 Cat: A (Rel-16)  
  
 Source: CMCC*

**Abstract:**

The same illustration figure of the transient period of NR is added in accordance with TS 37.104.

**Discussion:**

.

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

**R4-2001200 TS 37.141 - Issues with TC applicabilities for CS17 and CS18**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution highlights some issues with TC applicabilities for CS17 and CS18.

**Discussion:**

.

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

**R4-2001201 CR to TS 37.141 Rel-15 - Issues with TC applicabilities CS17**

*Type: CR For: Agreement  
 37.141 v15.9.0 CR-0923 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

This CR is fixing the issues with TC applicabilities for CS17

**Discussion:**

.

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

**R4-2001202 CR to TS 37.141 Rel-16 - Issues with TC applicabilities CS17-CS18**

*Type: CR For: Agreement  
 37.141 v16.4.0 CR-0924 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR is fixing the issues with TC applicabilities for CS17 and CS18

**Discussion:**

.

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

**R4-2001685 CR to 38.141-2 on Correction of Receiver Spurious Emissions**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0131 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The CR corrects a CR implementation error in TS 38.141-2 (Rel-15) for the new BS type 1-O Receiver Spurious emission limits.

**Discussion:**

.

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

##### 6.8.2.3 NR conformance testing specifications [NR\_newRAT-Perf]

**R4-2000662 CR to TR 38.141-1: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0089 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘.

**Discussion:**

.

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

**R4-2000663 CR to TR 38.141-1: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0090 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘.

**Discussion:**

.

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

**R4-2000664 CR to TR 38.141-2: Corrections on rated carrier output power symbols and clarifications on procedure for reverberation chamber**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0108 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘.

2) Clarify and align the wordings in the procedure for reverberation chamber in all clauses. Typo are also corrected.

**Discussion:**

.

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

**R4-2000665 CR to TR 38.141-2: Corrections on rated carrier output power symbols and clarifications on procedure for reverberation chamber**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0109 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘.

2) Clarify and align the wordings in the procedure for reverberation chamber in all clauses. Typo are also corrected.

**Discussion:**

.

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

**R4-2000675 CR to TR 38.141-1: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0094 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘.

**Discussion:**

.

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

**R4-2000676 CR to TR 38.141-1: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0095 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘.

**Discussion:**

.

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

**R4-2000677 CR to TR 38.141-2: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0112 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘. Typo are also corrected.

**Discussion:**

.

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

**R4-2000678 CR to TR 38.141-2: Corrections on rated carrier output power symbols**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0113 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the symbol ‘PRated‘ to the defined symbol ‘Prated‘. Typo are also corrected.

**Discussion:**

.

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

**R4-2001681 CR to 38.141-1 Corrections to test models, TPDR and modulation quality tests sections**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0104 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001682 CR to 38.141-1 Corrections to test models, TPDR and modulation quality tests sections**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0105 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001683 CR to 38.141-2 updates for reference to annex F and OFDM symbol TX power**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0129 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001684 CR to 38.141-2 updates for reference to annex F and OFDM symbol TX power**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0130 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001907 Corrections related to Foffset across specifications**

*Type: other For: Agreement  
 Source: Ericsson*

**Abstract:**

The different statements related to Foffset and Foffset,RAT are not aligned across the specs. In some spec definitions are missing. Proposal to align

**Discussion:**

.

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

**R4-2001908 Alignment of extreme condition testing for BS output power across specifications**

*Type: other For: Agreement  
 Source: Ericsson*

**Abstract:**

There is a different approach to extreme condition testing for BS output power across the specifications. Alignment is necessary. Two proposals are presented for agreement

**Discussion:**

.

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

**R4-2001909 TS 38.141-2: Editorial corrections**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0138 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

There is a mistake in the table with interfering signals for rx intermod testing. This mistake is only present in 38.141-2 rel 16

**Discussion:**

.

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

**R4-2001910 TS 38.141-1: Correction on testing under extreme conditions for BS output powerr**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0115 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The tdoc proposes correction of the description of testing under extreme conditions.

**Discussion:**

.

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

**R4-2001911 TS 38.141-1: Correction on testing under extreme conditions for BS output powerr**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0116 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The tdoc proposes correction of the description of testing under extreme conditions.

**Discussion:**

.

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

**R4-2001912 TS 38.141-2: Correction on testing under extreme conditions for BS radiated transmit power**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0139 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The tdoc proposes correction of the description of testing under extreme conditions.

**Discussion:**

.

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

**R4-2001913 TS 38.141-2: Correction on testing under extreme conditions for BS radiated transmit power**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0140 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The tdoc proposes correction of the description of testing under extreme conditions.

**Discussion:**

.

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

#### 6.8.3 Common for 38.141-1 and 38.141-2 [NR\_newRAT-Perf]

##### 6.8.3.1 Test configurations [NR\_newRAT-Perf]

**R4-2000666 CR to TR 38.141-1: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0091 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For NRTC1 power allocation, set the power spectral density of each carrier to the same level only be used for testing BS supporting CA only operation (D.15), and set the power of each carrier to the same level for testing BS supporting multiple carrier

**Discussion:**

.

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

**R4-2000667 CR to TR 38.141-1: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0092 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For NRTC1 power allocation, set the power spectral density of each carrier to the same level only be used for testing BS supporting CA only operation (D.15), and set the power of each carrier to the same level for testing BS supporting multiple carrier

**Discussion:**

.

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

**R4-2000668 CR to TR 38.141-2: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0110 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For power allocation for all test configurations except NRTC2, set the power of each carrier to the same level, and use rated transmitter TRP,Prated,t,TRP (D.38) instead of rated carrier TRP,PRated,c,TRP (D.37) for the total radiated power.

2) For NRTC

**Discussion:**

.

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

**R4-2000669 CR to TR 38.141-2: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0111 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For power allocation for all test configurations except NRTC2, set the power of each carrier to the same level, and use rated transmitter TRP,Prated,t,TRP (D.38) instead of rated carrier TRP,PRated,c,TRP (D.37) for the total radiated power.

2) For NRTC

**Discussion:**

.

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

**R4-2000679 CR to TR 38.141-1: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0096 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For NRTC1 power allocation, set the power spectral density of each carrier to the same level only be used for testing BS supporting CA only operation (D.15), and set the power of each carrier to the same level for testing BS supporting multiple carrier

**Discussion:**

.

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

**R4-2000680 CR to TR 38.141-1: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0097 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For NRTC1 power allocation, set the power spectral density of each carrier to the same level only be used for testing BS supporting CA only operation (D.15), and set the power of each carrier to the same level for testing BS supporting multiple carrier

**Discussion:**

.

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

**R4-2000681 CR to TR 38.141-2: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0114 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For power allocation for all test configurations except NRTC2, set the power of each carrier to the same level, and use rated transmitter TRP,Prated,t,TRP (D.38) instead of rated carrier TRP,PRated,c,TRP (D.37) for the total radiated power.

2) For NRTC

**Discussion:**

.

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

**R4-2000682 CR to TR 38.141-2: Corrections on generation of test configurations**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0115 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

1) For power allocation for all test configurations except NRTC2, set the power of each carrier to the same level, and use rated transmitter TRP,Prated,t,TRP (D.38) instead of rated carrier TRP,PRated,c,TRP (D.37) for the total radiated power.

2) For NRTC

**Discussion:**

.

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

##### 6.8.3.2 Test cases [NR\_newRAT-Perf]

##### 6.8.3.3 Test models [NR\_newRAT-Perf]

**R4-2001171 Discussion on random data content of physical channels for NR test models**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

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

**R4-2001676 Discussion on data content for NR test models**

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

**Discussion:**

.

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

**R4-2001677 CR to 38.141-1 updates for OSTP calculations**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0102 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001678 CR to 38.141-1 updates for OSTP calculations**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0103 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001679 CR to 38.141-2 updates for OSTP calculations**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0127 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001680 CR to 38.141-2 updates for OSTP calculations**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0128 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001722 Random data content of physical channels for NR test modes**

*Type: other For: Discussion  
 38.141-1 v..  
 Source: Ericsson*

**Abstract:**

In this contribution, further analysis of the 5 topic points agreed in [1] are exhibited.

**Discussion:**

.

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

**R4-2001723 CR to TS 38.141-1: Random data content for NR BS Test Models**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0106 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Update data content of ‘all zero data’ to random data

**Discussion:**

.

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

**R4-2001724 CR to TS 38.141-1: Random data content for NR BS Test Models**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0107 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

corresponding Cat A CR

**Discussion:**

.

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

**R4-2001725 CR to TS 38.141-2: Random data content for NR BS Test Models**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0133 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Update data content of ‘all zero data’ to random data

**Discussion:**

.

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

**R4-2001726 CR to TS 38.141-2: Random data content for NR BS Test Models**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0108 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

corresponding Cat A CR

**Discussion:**

.

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

**R4-2001730 Scrambling and initialization for test models**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

In RAN4#93, discussions about randomization of data were captured in WF. At issue: the scrambling seed for the shared channel in LTE is a function of the subframe number while in NR, the scrambling seed is independent of the slot number. As a result of th

**Discussion:**

.

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

**R4-2001805 Study on NR Test Model signal characteristic by data content choice**

*Type: other For: Discussion  
 Source: Keysight Technologies UK Ltd*

**Discussion:**

.

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

#### 6.8.4 Conducted conformance testing (38.141-1) [NR\_newRAT-Perf]

**R4-2001824 CR to TS 38.141-1: OBUE Cat. B Option 2 correction for n7, Rel-15**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0111 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

Consideration of the ECC regulations for the AAS in 2.6GHz bands in Europe to accout for n7 in OBUE Cat. B Option 2 emission limits.

**Discussion:**

.

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

**R4-2001825 CR to TS 38.141-1: OBUE Cat. B Option 2 correction for n7, Rel-16**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0112 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

Consideration of the ECC regulations for the AAS in 2.6GHz bands in Europe to accout for n7 in OBUE Cat. B Option 2 emission limits.

**Discussion:**

.

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

**R4-2001828 CR to TS 38.141-1: Corrections for the extreme environment testing , Rel-15**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0113 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

Clarification of text ambiguity on the extreme test conditions applicability in TS 38.141-1.

**Discussion:**

.

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

**R4-2001830 CR to TS 38.141-1: Corrections for the extreme environment testing , Rel-16**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0114 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

Clarification of text ambiguity on the extreme test conditions applicability in TS 38.141-1.

**Discussion:**

.

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

##### 6.8.4.1 MU and TT analysis [NR\_newRAT-Perf]

##### 6.8.4.2 BS Demodulation conformance testing (38.141-1) [NR\_newRAT-Perf]

###### 6.8.4.2.1 Test system related MU and TT [NR\_newRAT-Perf]

#### 6.8.5 Radiated conformance testing (38.141-2) [NR\_newRAT-Perf]

**R4-2001826 CR to TS 38.141-2: OBUE Cat. B Option 2 correction for n7 and n38, Rel-15**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0134 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

Consideration of the ECC regulations for the AAS in 2.6GHz bands in Europe to accout for n7 and n38 in OBUE Cat. B Option 2 emission limits.

**Discussion:**

.

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

**R4-2001827 CR to TS 38.141-2: OBUE Cat. B Option 2 correction for n7 and n38, Rel-16**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0135 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

Consideration of the ECC regulations for the AAS in 2.6GHz bands in Europe to accout for n7 and n38 in OBUE Cat. B Option 2 emission limits.

**Discussion:**

.

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

**R4-2001829 CR to TS 38.141-2: Corrections for the extreme environment testing , Rel-15**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0136 Cat: F (Rel-15)  
  
 Source: Huawei*

**Abstract:**

Clarification of text ambiguity on the extreme test conditions applicability in TS 38.141-2.

**Discussion:**

.

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

**R4-2001831 CR to TS 38.141-2: Corrections for the extreme environment testing , Rel-16**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0137 Cat: A (Rel-16)  
  
 Source: Huawei*

**Abstract:**

Clarification of text ambiguity on the extreme test conditions applicability in TS 38.141-2.

**Discussion:**

.

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

##### 6.8.5.1 Common to FR1 and FR2 radiated conformance testing [NR\_newRAT-Perf]

**R4-2002042 Simulation analysis of correlation between wanted and in-band unwanted emissions**

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

**Abstract:**

In this document, we carry out a comprehensive analysis using the simulation model (including the Matlab code) provided in [1] to study if the proposed approach [2][3] would fail to identify uncorrelated cases which have smaller directivity than the corre

**Discussion:**

.

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

##### 6.8.5.2 FR1 radiated conformance testing [NR\_newRAT-Perf]

###### 6.8.5.2.1 NR specific MU and TT analysis [NR\_newRAT-Perf]

##### 6.8.5.3 FR2 radiated conformance testing [NR\_newRAT-Perf]

###### 6.8.5.3.1 NR specific MU and TT analysis [NR\_newRAT-Perf]

##### 6.8.5.4 BS Demodulation conformance testing (38.141-2) [NR\_newRAT-Perf]

### 6.9 BS EMC [NR\_newRAT-Core]

#### 6.9.1 Editor input for BS EMC spec (38.113) [NR\_newRAT-Core]

#### 6.9.2 Core requirements [NR\_newRAT-Core]

##### 6.9.2.1 Emission requirements [NR\_newRAT-Core]

**R4-2001905 EMC for MSR and AAS BS: Proposal for reduction of test configurations - cont.**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Proposal for reduction of the number of test configurations for emissions and rx immunity, given the fact that multi-RAT functionality has little influence on EMC unwanted emissions

**Discussion:**

.

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

##### 6.9.2.2 Immunity requirements [NR\_newRAT-Core]

**R4-2001906 EMC RX immunity: Use of reverberation chamber**

*Type: other For: Agreement  
 Source: Ericsson*

**Abstract:**

Proposal for including reverberation chamber method for rx imunity testing

**Discussion:**

.

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

#### 6.9.3 Performance requirements [NR\_newRAT-Perf]

**R4-2001251 CR to TS 37.114 Add the transmitter exclusion band for MSR BS(subclause 4.4.1)**

*Type: CR For: Agreement  
 37.113 v15.8.0 CR-0108 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

Transmitter exclusion band has been added.

**Discussion:**

.

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

**R4-2001252 CR to TS 38.113 Add the transmitter exclusion band for NR BS(subclause 4.4.1)**

*Type: CR For: Agreement  
 38.113 v15.8.0 CR-0017 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

Transmitter exclusion band has been added.

**Discussion:**

.

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

**R4-2001717 CR to TS 37.114 Add the transmitter exclusion band for MSR BS(subclause 4.1)**

*Type: CR For: Agreement  
 37.114 v15.7.0 CR-0095 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

dded transmitter exclusion band for OTA AAS BS.

**Discussion:**

.

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

**R4-2001832 Proposal of using direct field strength approach to measure unwanted radiated emissions from the enclosure port of BS**

*Type: other For: Agreement  
 Source: Huawei*

**Abstract:**

The direct field strength approach is proposed to measure the EMC radiated emissions from the enclosure port of BS equipped with the antenna connectors / TAB connectors, as an alternative method to the substitution approach.

**Discussion:**

.

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

**R4-2001833 CR to TS 38.113: direct field strength measurements for the EMC RE, Rel-15**

*Type: CR For: Agreement  
 38.113 v15.8.0 CR-0018 Cat: B (Rel-15)  
  
 Source: Huawei*

**Abstract:**

CR for the direct field strength measurement method to measure the EMC radiated emissions from the enclosure port of BS equipped with the antenna connectors / TAB connectors, as an alternative method to the substitution approach.

**Discussion:**

.

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

### 6.10 RRM core maintenance (38.133/36.133) [NR\_newRAT-Core]

**R4-2001270 Reply LS on measurement reporting criteria for EN-DC**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001278 Discussion on measurement reporting criteria for EN-DC**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

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

#### 6.10.1 General [NR\_newRAT-Core]

**R4-2001329 On QCL Chain**

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

**Abstract:**

In this paper we discuss what is not clear in the current applicability rule and propose an update of the wording

**Discussion:**

.

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

**R4-2001335 Regarding measurements outside active time**

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

**Discussion:**

.

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

#### 6.10.2 Editorial CRs [NR\_newRAT-Core]

**R4-2000510 Editorial corrections for 38.133 Core Part R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0441 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

(Cat A) As instructed by the Editor, this CR captures some spotted editorial errors in TS 38.133

**Discussion:**

.

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

**R4-2000522 Editorial corrections for 38.133 Core Part R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0446 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the Editor, this CR captures some spotted editorial errors in TS 38.133

**Discussion:**

.

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

**R4-2000580 Editorial correction for active TCI state switching delay**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0453 Cat: F (Rel-15)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000581 Editorial correction for active TCI state switching delay**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0454 Cat: A (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

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

**R4-2000914 CR for reference correction on L1-RSRP measurement period (section 9.5.3)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0463 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000915 CR for reference correction on L1-RSRP measurement period (section 9.5.3)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0464 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

#### 6.10.3 UE measurement capability (38.133/36.133) [NR\_newRAT-Core]

**R4-2001259 Remaining issues on NR reporting criteria**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001260 CR to 38.133 NR reporting criteria**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0479 Cat: F (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001261 CR to 36.133 on NR reporting criteria**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6797 Cat: F (Rel-15)  
  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001262 CR to 36.133 on NR reporting criteria**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6798 Cat: A (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001331 Reporting Criteria discussion**

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

**Abstract:**

In this paper we discuss the RAN4 aspect of the reporting criteria

**Discussion:**

.

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

**R4-2001332 LS on UE reporting criteria**

*Type: LS out For: Approval  
 to RAN2  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001333 Reporting Criteria in 36.133**

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

**Abstract:**

clarifying the number of reporting criteria in 36.133 covering when a UE configured with EN-DC is configured with more LTE SCell’s or NR SCell’s

**Discussion:**

.

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

**R4-2001920 Reporting criteria with NR**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6822 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Reporting criteria with NR

**Discussion:**

.

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

**R4-2001921 Reporting criteria with NR**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6823 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Reporting criteria with NR

**Discussion:**

.

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

**R4-2001922 On reporting criteria with NR**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On reporting criteria with NR

**Discussion:**

.

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

**R4-2001923 On measurement reporting criteria with EN-DC**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On measurement reporting criteria with EN-DC

**Discussion:**

.

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

**R4-2001924 Response LS on measurement reporting criteria for EN-DC**

*Type: LS out For: Approval  
 to RAN2  
 Source: Ericsson*

**Abstract:**

Response LS on measurement reporting criteria for EN-DC

**Discussion:**

.

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

#### 6.10.4 RRM measurement and measurement gap (38.133/36.133) [NR\_newRAT-Core]

**R4-2000028 CR to correct the reference in clause 9.1.1 in 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0402 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000029 CR to correct the reference in clause 9.1.1 in 38.133 R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0403 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Cat A CR

**Discussion:**

.

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

**R4-2001330 Discussion on SMTC configuration in FR2**

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

**Abstract:**

UE complexity when performing intra-frequency measurements in FR2 and the complexity in ensuring the UE minimum requirements is discussed

**Discussion:**

.

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

**R4-2001406 Requirements on measurements outside gaps for FR2**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discusses implications of different SMTC/dual SMTC for different FR2 serving frequencies.

**Discussion:**

.

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

**R4-2001407 Requirements on measurements outside gaps for FR2**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0504 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to conclude on requirements for different SMTC/dual SMTC for different FR2 serving frequencies.

**Discussion:**

.

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

**R4-2001408 Requirements on measurements outside gaps for FR2**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0505 Cat: A (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

CR to conclude on requirements for different SMTC/dual SMTC for different FR2 serving frequencies.

**Discussion:**

.

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

**R4-2001588 Correction to inter-RAT measurement on LTE serving carrrier**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0517 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001589 Correction to inter-RAT measurement on LTE serving carrrier\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0518 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001590 Correction to inter-RAT measurement on NR serving carrrier**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6804 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001591 Correction to inter-RAT measurement on NR serving carrrier\_r16**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6805 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001606 Discussion on FR2 measurement outside gap**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon, MediaTek*

**Discussion:**

.

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

**R4-2001607 CR on FR2 measurement requriements outside gaps R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0533 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon, MediaTek*

**Discussion:**

.

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

**R4-2001608 CR on FR2 measurement requriements outside gaps R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0534 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon, MediaTek*

**Discussion:**

.

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

**R4-2001787 CR on TS38.133 for known cell definition of RRM measurement requirement (Section 9.2.4.3 and 9.3.6.3)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0552 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001788 CR on TS38.133 for known cell definition of RRM measurement requirement (Section 9.2.4.3 and 9.3.6.3)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0553 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001789 CR on TS38.133 for modification of the layer 3 and layer 1 measurement sharing factor when both SSB and RSSI symbol to be measured are considered (Section 9.2.5.1)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0554 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001790 CR on TS38.133 for modification of the layer 3 and layer 1 measurement sharing factor when both SSB and RSSI symbol to be measured are considered (Section 9.2.5.1)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0555 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001791 CR on TS38.133 for modification on number of cells and number of SSB to be measured for FR2 intra-freq. measurement (Section 9.2.3)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0556 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001792 CR on TS38.133 for modification on number of cells and number of SSB to be measured for FR2 intra-freq. measurement (Section 9.2.3)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0557 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001925 NR editorial correction**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0563 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

NR editorial correction

**Discussion:**

.

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

**R4-2001926 NR editorial correction**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0564 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

NR editorial correction

**Discussion:**

.

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

#### 6.10.5 Idle state and inactive state mobility for SA and NSA (38.133/36.133) [NR\_newRAT-Core]

#### 6.10.6 Connected state mobility (38.133/36.133) [NR\_newRAT-Core]

**R4-2000030 Discussion on handover requirements**

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

**Discussion:**

.

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

**R4-2000031 [CR] handover requirements 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0404 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000032 [CR] handover requirements 38.133 R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0405 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Cat A CR

**Discussion:**

.

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

**R4-2000033 Discussion on RRC procedure delay in RRC release with redirection**

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

**Discussion:**

.

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

**R4-2000034 [draft] LS on RRC procedure delay in RRC release with redirection**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE Corporation*

**Abstract:**

This LS tends to ask RAN2 to clarify the RRC procedure delay for RRC release with redirection.

**Discussion:**

.

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

**R4-2000511 Discussion on RRC re-establishment requirement**

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

**Discussion:**

.

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

**R4-2000512 CR on RRC re-establishment requirements R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0442 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000513 CR on RRC re-establishment requirements R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0443 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Cat A CR

**Discussion:**

.

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

**R4-2002075 CR 38.133 (6.1.1) Correction to handover requirements**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0574 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correcting misalignment between RRM specification and RRC specification on applicable RRC processing delay at handover.

**Discussion:**

.

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

**R4-2002076 CR 38.133 (6.1.1) Correction to handover requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0575 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Mirror CR. Correcting misalignment between RRM specification and RRC specification on applicable RRC processing delay at handover.

**Discussion:**

.

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

#### 6.10.7 Timing (38.133/36.133) [NR\_newRAT-Core]

##### 6.10.7.1 One shot timing adjustment requirements [NR\_newRAT-Core]

**R4-2000458 UE UL timing adjustment due to Rx beam change**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001009 Discussion on one shot timing adjustment for UE UL timing adjustment**

*Type: other For: Approval  
 Source: NEC*

**Abstract:**

This paper provides our views on one shot timing adjustment

**Discussion:**

.

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

**R4-2001258 Further discussion on one shot timing adjustment requirements**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001265 CR to 38.133 on one shot timing adjustment requirements**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0482 Cat: F (Rel-15)  
  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001266 CR to 38.133 on one shot timing adjustment requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0483 Cat: A (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

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

**R4-2001328 One shot UL transmit timing adjustment**

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

**Abstract:**

During a number of meetings RAN4 has been discussing the issue of UE autonomous beam change and the need for a larger one-shot adjustment of the UE UL transmit timing adjustment. In this paper we further analyse the impact on the gNB and give our view for

**Discussion:**

.

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

**R4-2001567 Further discussion on UE one-shot timing adjustment requirements**

*Type: other For: (not specified)  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001568 CR on removing one-shot timing adjustment requirements**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0508 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001569 CR on removing one-shot timing adjustment requirements (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0509 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001843 Further analysis of one shot timing adjustment requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Analysis of threshold (H) values for beam switch and interruption. Based on WF: R4-1907203.

**Discussion:**

.

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

**R4-2001844 Threshold for one shot UE timing adjustment requirements**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0560 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The CR specifies threshold (H) values for beam switch and removal of CSI-RS side conditions.

**Discussion:**

.

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

**R4-2001845 Threshold for one shot UE timing adjustment requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0561 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The CR specifies threshold (H) values for beam switch and removal of CSI-RS side conditions.

**Discussion:**

.

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

**R4-2002062 Further discussion on UL one shot timing adjustment**

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

**Discussion:**

.

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

##### 6.10.7.2 MTTD and MRTD requirements [NR\_newRAT-Core]

**R4-2001570 CR on inter-band EN-DC and NE-DC synchronous requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0510 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.10.7.3 Other timing requirements [NR\_newRAT-Core]

#### 6.10.8 Signaling characteristics (38.133/36.133) [NR\_newRAT-Core]

##### 6.10.8.1 RLM [NR\_newRAT-Core]

**R4-2001584 Correction on Psharingfactor**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0513 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001585 Correction on Psharingfactor\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0514 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.10.8.2 SCell activation delay requirements [NR\_newRAT-Core]

**R4-2002077 On corrections to SCell activation delay requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution providing justification for corrections to SCell activation delay timelines with respect to first available SSB burst, and with respect to interruption window.

**Discussion:**

.

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

**R4-2002078 CR 38.133 (8.3.2) Corrections to SCell activation delay requirements**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0576 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correcting timelines for remaining SCell activation cases in FR2 with respect to when first SSB burst is available. Correcting the interruption windows which currently are misaligned with (most) of the activation timelines.

**Discussion:**

.

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

**R4-2002079 CR 38.133 (8.3.2) Corrections to SCell activation delay requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0577 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Mirror CR. Correcting timelines for remaining SCell activation cases in FR2 with respect to when first SSB burst is available. Correcting the interruption windows which currently are misaligned with (most) of the activation timelines.

**Discussion:**

.

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

**R4-2002080 CR 38.133 (8.3.2) Correction of error in Rel-16 SCell activation**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0578 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correcting a CR implementation error specific to Rel-16 requirements for SCell activation of deactivated SCell

**Discussion:**

.

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

##### 6.10.8.3 PSCell addition/release requirements (36.133) [NR\_newRAT-Core]

**R4-2000055 [CR] SCell activation delay 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0411 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000056 [CR] SCell activation delay 38.133 R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0412 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Cat A CR

**Discussion:**

.

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

**R4-2002081 On corrections to PSCell change delay requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution providing justification for proposed changes to PSCell change delay requirements.

**Discussion:**

.

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

**R4-2002082 CR 38.133 (8.11) Corrections to PSCell change delay requirements**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0579 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correction of PSCell change requirements. Removing additional time for SW reloading for source and target PSCell in same FR.

**Discussion:**

.

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

**R4-2002083 CR 38.133 (8.11) Corrections to PSCell change delay requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0580 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correction of PSCell change requirements. Removing additional time for SW reloading for source and target PSCell in same FR.

**Discussion:**

.

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

##### 6.10.8.4 TCI state switching requirements [NR\_newRAT-Core]

**R4-2000035 CR for TCI state switch 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0406 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

..

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

**R4-2000036 CR for TCI state switch 38.133 R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0407 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000514 Discussion on TCI state known status mismatch**

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

**Discussion:**

.

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

**R4-2000789 CR on RAN4 requirement of TCI change for R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0458 Cat: F (Rel-15)  
  
 Source: Apple*

**Discussion:**

.

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

**R4-2000790 CR on RAN4 requirement of TCI change for R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0459 Cat: A (Rel-16)  
  
 Source: Apple*

**Discussion:**

.

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

**R4-2001010 Problem of TCI state known status mismatch**

*Type: other For: Approval  
 Source: NEC*

**Abstract:**

Possible problem of TCI state known status mismatch at gNB and UE is discussed

**Discussion:**

.

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

**R4-2001015 CR to address TCI state known status mismatch in 38.133**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0474 Cat: F (Rel-15)  
  
 Source: NEC*

**Abstract:**

Adding a note to point out the issue and the solution timeline for different TCI state known status at gNB and UE.

**Discussion:**

.

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

**R4-2001026 CR on TCI state switch**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0475 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001334 Correction to Active TCI state list update delay**

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

**Abstract:**

Coorection of timing requirement

**Discussion:**

.

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

**R4-2001668 Correction on the MAC based TCI state switching**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0549 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001669 Correction on the MAC based TCI state switching**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0550 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2002052 Corrections to MAC based TCI state switch**

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

**Discussion:**

.

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

**R4-2002066 CR for correction to MAC-CE based TCI State switch timeline (Clause 8.10.3)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0572 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

**R4-2002067 CR for correction to MAC-CE based TCI State switch timeline (Clause 8.10.3)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0573 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

##### 6.10.8.5 BWP switching requirements [NR\_newRAT-Core]

**R4-2000906 Corrections for BWP switch delay R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0461 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000907 Corrections for BWP switch delay R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0462 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Cat A CR

**Discussion:**

.

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

**R4-2001586 Correction to BWP switching delay**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0515 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001587 Correction to BWP switching delay\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0516 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.10.8.6 Other requirements [NR\_newRAT-Core]

#### 6.10.9 Beam management based on SSB and/or CSI-RS (38.133) [NR\_newRAT-Core]

**R4-2000916 CR for measurement restriction in FR2 across CCs (section 8.1.2.3, 8.1.3.3, 8.5.2.3, 8.5.3.3, 8.5.5.3, 8.5.6.3, 9.5.5.1, 9.5.5.2)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0465 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000917 CR for measurement restriction in FR2 across CCs (section 8.1.2.3, 8.1.3.3, 8.5.2.3, 8.5.3.3, 8.5.5.3, 8.5.6.3, 9.5.5.1, 9.5.5.2)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0466 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000918 CR for SSB based candidate beam detection (section 8.5.5.2)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0467 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000919 CR for SSB based candidate beam detection (section 8.5.5.2)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0468 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000920 CR for CSI-RS based L1-RSRP measurement period (section 9.5.4.2)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0469 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000921 CR for CSI-RS based L1-RSRP measurement period (section 9.5.4.2)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0470 Cat: A (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000922 CR on TSMTCperiod (section 8.1.2.2, 8.1.3.2, 8.5.2.2, 8.5.3.2, 8.5.5.2, 8.5.6.2, 9.5.4.1, 9.5.4.2)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0471 Cat: F (Rel-15)  
  
 Source: MediaTek inc., Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2000923 CR on TSMTCperiod (section 8.1.2.2, 8.1.3.2, 8.5.2.2, 8.5.3.2, 8.5.5.2, 8.5.6.2, 9.5.4.1, 9.5.4.2)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0472 Cat: A (Rel-16)  
  
 Source: MediaTek inc., Huawei, HiSilicon*

**Discussion:**

.

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

#### 6.10.10 Requirements for NE-DC (option 4) and NGEN-DC [NR\_newRAT-Core]

**R4-2001609 CR to remove RSTD requirements for NE-DC in 36.133 R15**

*Type: CR For: Agreement  
 36.133 v15.9.0 CR-6806 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001610 CR to remove RSTD requirements for NE-DC in 36.133 R16**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6807 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 6.10.11 Requirements for NR-NR Dual Connectivity [NR\_newRAT-Core]

#### 6.10.12 Other requirements [NR\_newRAT-Core]

**R4-2000026 CR to correct the header of Table for OTDOA 38.133 R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0400 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000027 CR to correct the header of Table for OTDOA 38.133 R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0401 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

### 6.11 RRM perf maintenance (38.133/36.133) [NR\_newRAT-Perf]

#### 6.11.1 General [NR\_newRAT-Perf]

**R4-2000037 CR to remove duplicated units in tables in clause 10.1**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0408 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000038 CR to remove duplicated units in tables in clause 10.1 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0409 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

Cat A CR

**Discussion:**

.

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

**R4-2001592 Correction to configurations for TRS**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0519 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001593 Correction to configurations for TRS\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0520 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001619 OCNG pattern for TDM-ed SSB R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0543 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001620 OCNG pattern for TDM-ed SSB R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0544 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 6.11.2 Editorial CRs [NR\_newRAT-Perf]

**R4-2000293 CR to TS38.133 on correction for L1-RSRP measurement report (Section 9.5.3)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0433 Cat: F (Rel-15)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2000294 CR to TS38.133 on correction for L1-RSRP measurement report (Section 9.5.3)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0434 Cat: F (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2000515 Editorial corrections for 38.133 Perf Part R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0444 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

**Abstract:**

As instructed by the Editor, this CR captures some spotted editorial errors in TS 38.133

**Discussion:**

.

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

**R4-2000516 Editorial corrections for 38.133 Perf Part R16 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0445 Cat: A (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

(Cat A) As instructed by the Editor, this CR captures some spotted editorial errors in TS 38.133

**Discussion:**

.

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

**R4-2001223 Editorial corrections to make test cases appear in Table of contents**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0477 Cat: D (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Many headings in Annex A RRM test case section have the wrong style, which means they do not show up in the Table of Contents. This means that many RRM test cases are invisible in the Table of Contents, giving an incorrect overview of test cases.

**Discussion:**

.

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

**R4-2001225 Editorial corrections to make test cases appear in Table of contents**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0478 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Many headings in Annex A RRM test case section have the wrong style, which means they do not show up in the Table of Contents. This means that many RRM test cases are invisible in the Table of Contents, giving an incorrect overview of test cases.

**Discussion:**

.

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

**R4-2001365 CR to TS 38.133: Corrections to FR1-FR2 event triggered test cases Annex A.5 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0487 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001366 CR to TS 38.133: Corrections to FR1-FR2 event triggered test cases Annex A.5 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0488 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001367 CR to TS 38.133: Corrections to FR1-FR2 event triggered test cases Annex A.7 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0489 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001368 CR to TS 38.133: Corrections to FR1-FR2 event triggered test cases Annex A.7 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0490 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001369 CR to TS 38.133: Clarifications to AoA setup and AoA cell assignement Annex A.5 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0491 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001370 CR to TS 38.133: Clarifications to AoA setup and AoA cell assignement Annex A.5 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0492 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001371 CR to TS 38.133: Clarifications to AoA setup Annex A.8 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0493 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001372 CR to TS 38.133: Clarifications to AoA setup Annex A.8 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0494 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

#### 6.11.3 RRM test cases [NR\_newRAT-Perf]

**R4-2001600 Correction to RF channels configuration**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0527 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001601 Correction to RF channels configuration\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0528 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.11.3.1 RRC\_IDLE state mobility test cases [NR\_newRAT-Perf]

**R4-2000082 Corrections to RRM Test case A.7.1.1.2**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0416 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

The Es/Noc changes in R4-1914411 were not fully implemented, and result in contradictions in dB values. This CR corrects.

Noc values should be specified per frequency.

**Discussion:**

.

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

**R4-2000083 Corrections to RRM Test case A.7.1.1.2**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0417 Cat: F (Rel-16)  
  
 Source: ANRITSU LTD*

**Discussion:**

.

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

**R4-2000163 Correction to FR1-E-UTRA Inter-RAT cell re-selection test cases**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0420 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

The FR1 PRACH configuration indices in these test cases current cause the PRACH to fall entirely in DL portions of the cell specific TDD UL/DL configuration, so PRACH config becomes invalid. This CR changes the PRACH configuration index so that some PRACH

**Discussion:**

.

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

**R4-2000164 Correction to FR1-E-UTRA Inter-RAT cell re-selection test cases**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0421 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

The FR1 PRACH configuration indices in these test cases current cause the PRACH to fall entirely in DL portions of the cell specific TDD UL/DL configuration, so PRACH config becomes invalid. This CR changes the PRACH configuration index so that some PRACH

**Discussion:**

.

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

###### 6.11.3.1.1 SA idle/inactive cell reselection [NR\_newRAT-Perf]

**R4-2001617 CR on cell reselection test cases for FR2 SA R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0541 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001618 CR on cell reselection test cases for FR2 SA R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0542 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.11.3.2 RRC\_CONNECTED state mobility test cases [NR\_newRAT-Perf]

###### 6.11.3.2.1 NR-NR Handovers [NR\_newRAT-Perf]

###### 6.11.3.2.2 NR handovers to other RATs [NR\_newRAT-Perf]

###### 6.11.3.2.3 RRC Re-establishment [NR\_newRAT-Perf]

###### 6.11.3.2.4 Random access [NR\_newRAT-Perf]

**R4-2001611 CR on random access test case R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0535 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001612 CR on random access test case R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0536 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.2.5 RRC Release with redirection to NR/E-UTRAN [NR\_newRAT-Perf]

**R4-2001602 Correction to RRC release with redirection TCs**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0529 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001603 Correction to RRC release with redirection TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0530 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.11.3.3 Timing test cases [NR\_newRAT-Perf]

**R4-2000168 Correction to SRS periodicity and Offset for UL transit timing with DRx config**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0424 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

In this test case SRS timing is configured on slot 0, which is not an UL slot. CR corrects periodicityAndOffset-p values.

**Discussion:**

.

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

**R4-2000169 Correction to SRS periodicity and Offset for UL transit timing with DRx config**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0425 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

In this test case SRS timing is configured on slot 0, which is not an UL slot. CR corrects periodicityAndOffset-p values.

**Discussion:**

.

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

###### 6.11.3.3.1 EN-DC timing accuracy and adjustment [NR\_newRAT-Perf]

###### 6.11.3.3.2 SA timing accuracy and adjustment [NR\_newRAT-Perf]

###### 6.11.3.3.3 EN-DC TA accuracy [NR\_newRAT-Perf]

###### 6.11.3.3.4 SA TA accuracy [NR\_newRAT-Perf]

##### 6.11.3.4 RLM test cases [NR\_newRAT-Perf]

**R4-2002135 PRACH configurations in FR1 SSB based RLM tests**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **revised to R4-2002160**.

**R4-2002160 PRACH configurations in FR1 SSB based RLM tests**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: Qualcomm*

(Replaces R4-2002135)

**Discussion:**

.

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

###### 6.11.3.4.1 EN-DC SSB RLM for PSCell IS and OOS [NR\_newRAT-Perf]

**R4-2001613 CR on SSB RLM test cases EN-DC R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0537 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001614 CR on SSB RLM test cases EN-DC R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0538 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.4.2 SA SSB RLM for PCell IS and OOS [NR\_newRAT-Perf]

**R4-2001615 CR on SSB RLM test cases SA R15**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0539 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001616 CR on SSB RLM test cases SA R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0540 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.4.3 EN-DC CSI RLM for PSCell [NR\_newRAT-Perf]

###### 6.11.3.4.4 SA CSI RLM for PCell [NR\_newRAT-Perf]

###### 6.11.3.4.5 SSB RLM scheduling restriction &impact on mobility [NR\_newRAT-Perf]

##### 6.11.3.5 Interruption test cases [NR\_newRAT-Perf]

**R4-2001596 Correction to interruption TCs**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0523 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001597 Correction to interruption TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0524 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.5.1 EN-DC interruption due to DRX transition [NR\_newRAT-Perf]

###### 6.11.3.5.2 EN-DC interruption due to deactivated SCell operations [NR\_newRAT-Perf]

###### 6.11.3.5.3 SA interruptions at SCell addition/release/(de-)activation [NR\_newRAT-Perf]

###### 6.11.3.5.4 SA interruptions due to measurement on deactivated SCell [NR\_newRAT-Perf]

##### 6.11.3.6 SCell activation and de-activation test cases [NR\_newRAT-Perf]

###### 6.11.3.6.1 EN-DC SCell activation/deactivation delay [NR\_newRAT-Perf]

###### 6.11.3.6.2 SA SCell activation/deactivation [NR\_newRAT-Perf]

##### 6.11.3.7 UE UL carrier RRC reconfiguration delay test cases [NR\_newRAT-Perf]

**R4-2001604 Correction to UL reconfiguration delay TCs**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0531 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001605 Correction to UL reconfiguration delay TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0532 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 6.11.3.8 Beam failure detection and link recovery procedure test cases [NR\_newRAT-Perf]

**R4-2002134 PRACH configurations in FR1 SSB based BFR tests**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: Qualcomm*

**Discussion:**

.

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

###### 6.11.3.8.1 EN-DC beam failure detection and recovery [NR\_newRAT-Perf]

###### 6.11.3.8.2 SA beam failure detection and recovery [NR\_newRAT-Perf]

###### 6.11.3.8.3 EN-DC/SA scheduling restriction for BFD [NR\_newRAT-Perf]

##### 6.11.3.9 Active BWP switching test cases [NR\_newRAT-Perf]

##### 6.11.3.10 Measurement procedure test cases [NR\_newRAT-Perf]

**R4-2000161 Correction to Active UL BWP for SA intra-frequency event triggered reporting with per-UE gaps**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0418 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

In some test cases the Uplink BWP is currently specified with different width from the Downlink BWP. The Cell 1 Active Uplink BWP is changed to ULBWP.1.2, matching the Downlink.

**Discussion:**

.

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

**R4-2000162 Correction to Active UL BWP for SA intra-frequency event triggered reporting with per-UE gaps**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0419 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

In some test cases the Uplink BWP is currently specified with different width from the Downlink BWP. The Cell 1 Active Uplink BWP is changed to ULBWP.1.2, matching the Downlink.

**Discussion:**

.

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

**R4-2000166 Removal of Time offset between PCell and PSCell in SA RRM Test cases**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0422 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

The parameter “Time offset between PCell and PSCell” is not needed in SA mode as there is no PSCell.

**Discussion:**

.

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

**R4-2000167 Removal of Time offset between PCell and PSCell in SA RRM Test cases**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0423 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

The parameter “Time offset between PCell and PSCell” is not needed in SA mode as there is no PSCell.

**Discussion:**

.

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

###### 6.11.3.10.1 EN-DC cell search and L1 measurement period [NR\_newRAT-Perf]

###### 6.11.3.10.2 SA cell search and L1 measurement period [NR\_newRAT-Perf]

**R4-2001598 Correction to intra-frequency measurement with gap TCs**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0525 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001599 Correction to intra-frequency measurement with gap TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0526 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.10.3 Inter-frequency measurement with LTE PCell [NR\_newRAT-Perf]

###### 6.11.3.10.4 EN-DC NR inter-frequency measurement [NR\_newRAT-Perf]

###### 6.11.3.10.5 SA NR inter-frequency measurement [NR\_newRAT-Perf]

**R4-2000382 CR on test cases for SA FR2 inter-frequency measurement R15 (section A.7.6.2)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0438 Cat: F (Rel-15)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000383 CR on test cases for SA FR2 inter-frequency measurement R16 (section A.7.6.2)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0439 Cat: A (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

###### 6.11.3.10.6 EN-DC SFTD measurement delay [NR\_newRAT-Perf]

###### 6.11.3.10.7 Inter-RAT E-UTRA measurement (with NR PCell) [NR\_newRAT-Perf]

**R4-2001594 Correction to FR1 SA inter-RAT measurement TCs**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0521 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001595 Correction to FR1 SA inter-RAT measurement TCs\_r16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0522 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.10.8 EN-DC L1-RSRP measurement delay [NR\_newRAT-Perf]

###### 6.11.3.10.9 SA L1-RSRP measurement delay [NR\_newRAT-Perf]

##### 6.11.3.11 Measurement performance test cases [NR\_newRAT-Perf]

###### 6.11.3.11.1 Intra-frequency RSRP accuracy for FR1 and FR2 [NR\_newRAT-Perf]

**R4-2000170 Update of Test Requirements, FR2 Intra-frequency SS-RSRP accuracy Test cases**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0426 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Updates the Test requirements in Test cases A.5.7.1.1 and A.7.7.1.1. CR R4-1915894 on UE Gain range “G” was agreed at RAN4#93, and allows the range of absolute RSRP reported values to be calculated. The angle of arrival for each cell is now taken into acc

**Discussion:**

.

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

**R4-2000171 Update of Test Requirements, FR2 Intra-frequency SS-RSRP accuracy Test cases**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0427 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Updates the Test requirements in Test cases A.5.7.1.1 and A.7.7.1.1. CR R4-1915894 on UE Gain range “G” was agreed at RAN4#93, and allows the range of absolute RSRP reported values to be calculated. The angle of arrival for each cell is now taken into acc

**Discussion:**

.

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

###### 6.11.3.11.2 Inter-frequency RSRP accuracy for FR1 and FR2 [NR\_newRAT-Perf]

**R4-2000172 Update of Test requirements, FR2 Inter-frequency SS-RSRP accuracy Test cases**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0428 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

Updates the Test requirements in Test cases A.5.7.1.2 and A.7.7.1.2. CR R4-1915894 on UE Gain range “G” was agreed at RAN4#93, and allows the range of absolute RSRP reported values to be calculated. The angle of arrival for each cell is now taken into acc

**Discussion:**

.

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

**R4-2000173 Update of Test requirements, FR2 Inter-frequency SS-RSRP accuracy Test cases**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0429 Cat: A (Rel-16)  
  
 Source: ANRITSU LTD*

**Abstract:**

Updates the Test requirements in Test cases A.5.7.1.2 and A.7.7.1.2. CR R4-1915894 on UE Gain range “G” was agreed at RAN4#93, and allows the range of absolute RSRP reported values to be calculated. The angle of arrival for each cell is now taken into acc

**Discussion:**

.

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

###### 6.11.3.11.3 Intra-frequency RSRQ accuracy for FR1 and FR2 [NR\_newRAT-Perf]

###### 6.11.3.11.4 Inter-frequency RSRQ accuracy for FR1 and FR2 [NR\_newRAT-Perf]

**R4-2001373 CR to TS 38.133: Addition of TC A.4.7.2.2 (Rel-15)**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0495 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001374 CR to TS 38.133: Addition of TC A.4.7.2.2 (Rel-16)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0496 Cat: A (Rel-16)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001565 CR on test case in A.4.7.2.2**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0506 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001566 CR on test case in A.4.7.2.2 (Cat A)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0507 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

###### 6.11.3.11.5 SA/EN-DC SS-SINR measurement accuracies [NR\_newRAT-Perf]

###### 6.11.3.11.6 Beam management: L1-RSRP reporting [NR\_newRAT-Perf]

**R4-2001396 Editorial correction of EN-DC FR1 L1-RSRP measurement for beam reporting**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0499 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correction of EN-DC FR1 L1-RSRP measurement for beam reporting

**Discussion:**

.

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

**R4-2001397 Editorial correction of EN-DC FR1 L1-RSRP measurement for beam reporting**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0500 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correction of EN-DC FR1 L1-RSRP measurement for beam reporting

**Discussion:**

.

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

**R4-2001398 Editorial correction of NR SA FR1 L1-RSRP measurement for beam reporting**

*Type: CR For: Agreement  
 38.133 v15.8.0 CR-0501 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Correction of NR SA FR1 L1-RSRP measurement for beam reporting

**Discussion:**

.

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

**R4-2001399 Editorial correction of NR SA FR1 L1-RSRP measurement for beam reporting**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0502 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Correction of NR SA FR1 L1-RSRP measurement for beam reporting

**Discussion:**

.

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

###### 6.11.3.11.7 EN-DC SFTD measurement accuracy [NR\_newRAT-Perf]

###### 6.11.3.11.8 SA NR inter-RAT E-UTRAN RSRP accuracy [NR\_newRAT-Perf]

###### 6.11.3.11.9 SA NR inter-RAT E-UTRAN RSRQ accuracy [NR\_newRAT-Perf]

###### 6.11.3.11.10 SA NR inter-RAT E-UTRAN SINR accuracy [NR\_newRAT-Perf]

##### 6.11.3.12 NR PSCell addition and release in EN-DC [NR\_newRAT-Perf]

##### 6.11.3.13 TCI switching delay [NR\_newRAT-Perf]

##### 6.11.3.14 E-UTRAN standalone test for NR [NR\_newRAT-Perf]

###### 6.11.3.14.1 E-UTRAN cell reselection to NR target cell [NR\_newRAT-Perf]

###### 6.11.3.14.2 E-UTRAN inter-RAT NR cell search and measurement delay [NR\_newRAT-Perf]

###### 6.11.3.14.3 E-UTRAN inter-RAT handover [NR\_newRAT-Perf]

###### 6.11.3.14.4 E-UTRAN inter-RAT NR measurement accuracy [NR\_newRAT-Perf]

### 6.12 Demodulation and CSI maintenance [NR\_newRAT-Perf]

#### 6.12.1 UE demodulation and CSI (38.101-4) [NR\_newRAT-Perf]

**R4-2000076 Clarification of Random PMI when testing**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0031 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

The use of random PMI when testing PDSCH demodulation and PMI requirements is not clear enough to implement the test cases as intended.

**Discussion:**

.

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

**R4-2000081 Correction to 5.3.3 4Rx PDCCH Demod Requirements**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0032 Cat: F (Rel-15)  
  
 Source: ANRITSU LTD*

**Abstract:**

For 4Rx PDCCH demodulation:

a) Table 5.3.3.1.2-1 Test 3 Aggregation level is contradicting with that specified by R.PDCCH 1-1.3 FDD. Change from 4 to 8, to align with Reference channel.

b) Table 5.3.3.2-1: Interleaver size is not defined for 2Tx case. Spe

**Discussion:**

.

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

**R4-2000353 CR on corrections for FR1 PDSCH demodulation performance tests**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0033 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

**R4-2000358 CR to TS 38.101-4: Editorial corrections (R15)**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0034 Cat: F (Rel-15)  
  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000564 On signal power ratios and mapping for UE requirements**

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

**Discussion:**

.

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

**R4-2000565 Update of DL physical channels**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0036 Cat: F (Rel-15)  
  
 Source: Rohde & Schwarz*

**Discussion:**

.

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

**R4-2001002 CR on number of NZP CSI-RS ports for RI reporting test in a TDD 4Rx test case**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0037 Cat: F (Rel-15)  
  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001450 CR: Updates to NR PDSCH test parameters (Rel-15)**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0038 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Corrected the number of HARQ process for TDD UL-DL pattern DS1S2U is 10 for 4Rx cases

**Discussion:**

.

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

#### 6.12.2 BS demodulation (38.104) [NR\_newRAT-Perf]

**R4-2000295 CR on correction of NR UCI on PUSCH conducted performance requirements for TS 38.141-1**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0084 Cat: D (Rel-15)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2000296 CR on correction of NR UCI on PUSCH conducted performance requirements for TS 38.141-1**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0085 Cat: A (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2000297 CR on correction of NR UCI on PUSCH radiated performance requirements for TS 38.141-2**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0103 Cat: D (Rel-15)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2000298 CR on correction of NR UCI on PUSCH radiated performance requirements for TS 38.141-2**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0104 Cat: A (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

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

**R4-2001172 IntraSlot frequency hopping applicability in the one OFDM symbol test case**

*Type: CR For: Agreement  
 38.104 v15.8.0 CR-0144 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Corrects erroneous assignment of hopping to single slot

**Discussion:**

.

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

**R4-2001173 IntraSlot frequency hopping applicability in the one OFDM symbol test case**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0145 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Corrects erroneous assignment of hopping to single slot

**Discussion:**

.

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

**R4-2001174 IntraSlot frequency hopping applicability in the one OFDM symbol test case**

*Type: CR For: Agreement  
 38.141-1 v15.4.0 CR-0099 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Corrects erroneous assignment of hopping to single slot

**Discussion:**

.

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

**R4-2001175 IntraSlot frequency hopping applicability in the one OFDM symbol test case**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0100 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Corrects erroneous assignment of hopping to single slot

**Discussion:**

.

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

**R4-2001176 IntraSlot frequency hopping applicability in the one OFDM symbol test case**

*Type: CR For: Agreement  
 38.141-2 v15.4.0 CR-0119 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Corrects erroneous assignment of hopping to single slot

**Discussion:**

.

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

**R4-2001177 IntraSlot frequency hopping applicability in the one OFDM symbol test case**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0120 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Corrects erroneous assignment of hopping to single slot

**Discussion:**

.

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

**R4-2001451 Discussion on HARQ timing for NR BS performance requirements**

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

**Abstract:**

This contribution share our view about the NR PUSCH testing considering NR UL is asynchronous that is different from LTE

**Discussion:**

.

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

### 6.13 Maintenance of the Positioning specs (36.171, 37.171 and 38.171) [NR\_newRAT-Perf or TEI]

**R4-2000147 Update of the Note 1 in the Power level and satellite allocation table for the Sensitivity Coarse time assistance requirements**

*Type: CR For: Agreement  
 36.171 v15.0.0 CR-0018 Cat: F (Rel-15)  
  
 Source: Spirent Communications*

**Discussion:**

.

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

**R4-2000148 Update of the Note 1 in the Power level and satellite allocation table for the Sensitivity Coarse time assistance requirements**

*Type: CR For: Agreement  
 38.171 v15.2.0 CR-0009 Cat: F (Rel-15)  
  
 Source: Spirent Communications*

**Discussion:**

.

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

**R4-2000149 Editorial change to TS 37.571-1 title**

*Type: CR For: Agreement  
 36.171 v15.0.0 CR-0019 Cat: F (Rel-15)  
  
 Source: Spirent Communications*

**Discussion:**

.

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

**R4-2000150 Editorial change to TS 37.571-1 title**

*Type: CR For: Agreement  
 37.171 v15.2.0 CR-0032 Cat: F (Rel-15)  
  
 Source: Spirent Communications*

**Discussion:**

.

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

**R4-2000151 Editorial change to TS 37.571-1 title**

*Type: CR For: Agreement  
 38.171 v15.2.0 CR-0010 Cat: F (Rel-15)  
  
 Source: Spirent Communications*

**Discussion:**

.

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

## 7 Rel-16 Work Items for LTE

### 7.1 LTE intra-band Carrier Aggregation for x CC DL/y CC UL including contiguous and non-contiguous spectrum (x>=y) [LTE\_CA\_R16\_intra]

#### 7.1.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_intra-Core/Perf]

**R4-2001498 Revised WID Basket WI for LTE Intra-band CA Rel-16**

*Type: WID revised For: Agreement  
 Source: Ericsson*

**Abstract:**

Revised WID Basket WI for LTE Intra-band CA Rel-16

**Discussion:**

.

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

**R4-2001505 TP for TR 36.716-01-01 for updated scope from RAN #86**

*Type: pCR For: Approval  
 36.716-01-01 v0.8.0  
 Source: Ericsson*

**Abstract:**

TP for TR 36.716-01-01 for updated scope from RAN #86

**Discussion:**

.

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

**R4-2001509 CR introduction of Rel-16 LTE Intra-band combinations in 36.101**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5600 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction of Rel-16 LTE Intra-band combinations in 36.101

**Discussion:**

.

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

#### 7.1.2 UE RF [LTE\_CA\_R16\_intra-Core]

**R4-2000192 TP for Rel-16 Intra-band CA for x CC DL/ y CC UL including contiguous and non-contiguous spectrum (x>=y): Bandwidth combination set, REFSENS and insertion loss parameters for CA\_48B, CA\_48A-48B, CA\_48B-48B, CA\_48B-48C, CA\_48B-48D, CA\_48B-48E with 1UL and**

*Type: TS or TR cover For: Approval  
 36.716-01-01 v0.6.0  
 Source: Charter Communications*

**Discussion:**

.

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

### 7.2 LTE inter-band Carrier Aggregation for 2 bands DL with 1 band UL [LTE\_CA\_R16\_2BDL\_1BUL]

#### 7.2.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_2BDL\_1BUL-Core/Perf]

**R4-2001375 Revised WID: Rel16 LTE inter-band CA for 2 bands DL with 1 band UL**

*Type: WID revised For: Agreement  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

**R4-2001376 Introduction of Rel-16 LTE inter-band CA for 2 bands DL with 1 band UL combinations in TS36101**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5599 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

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

#### 7.2.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_2BDL\_1BUL-Core]

#### 7.2.3 UE RF without specific issues [LTE\_CA\_R16\_2BDL\_1BUL-Core]

**R4-2000175 TP to TR 36.716-02-01: CA\_2-26**

*Type: pCR For: Approval  
 36.716-02-01 v0.7.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000176 TP to TR 36.716-02-01: CA\_26-66**

*Type: pCR For: Approval  
 36.716-02-01 v0.7.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2001377 Draft CR for 2DL/1UL CA\_2-48**

*Type: draftCR For: Endorsement  
 36.101 v16.4.0  
 Source: Qualcomm Incorporated, Verizon*

**Discussion:**

.

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

**R4-2001378 Draft CR for 2DL/1UL CA\_2-66**

*Type: draftCR For: Endorsement  
 36.101 v16.4.0  
 Source: Qualcomm Incorporated, Verizon*

**Discussion:**

.

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

**R4-2001379 Draft CR for 2DL/1UL CA\_4-5**

*Type: draftCR For: Endorsement  
 36.101 v16.4.0  
 Source: Qualcomm Incorporated, Verizon*

**Discussion:**

.

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

**R4-2001380 Draft CR for 2DL/1UL CA\_5-66**

*Type: draftCR For: Endorsement  
 36.101 v16.4.0  
 Source: Qualcomm Incorporated, Verizon*

**Discussion:**

.

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

**R4-2001381 Draft CR for 2DL/1UL CA\_13-46**

*Type: draftCR For: Endorsement  
 36.101 v16.4.0  
 Source: Qualcomm Incorporated, Verizon*

**Discussion:**

.

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

### 7.3 LTE inter-band Carrier Aggregation for 3 bands DL with 1 band UL [LTE\_CA\_R16\_3BDL\_1BUL]

#### 7.3.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_3BDL\_1BUL-Core/Perf]

**R4-2001778 Introduction of completed R16 3DL band combinations to TS 36.101**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5601 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 7.3.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_3BDL\_1BUL-Core]

**R4-2002006 draft CR 36.101 to add missing fallback CA\_1A-1A-3A-3A-7A**

*Type: draftCR For: Endorsement  
 36.101 v16.4.0  
 Source: Ericsson, Telstra*

**Abstract:**

draft CR 36.101 to add missing fallback CA\_1A-1A-3A-3A-7A

**Discussion:**

.

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

#### 7.3.3 UE RF without specific issues [LTE\_CA\_R16\_3BDL\_1BUL-Core]

**R4-2000177 TP to TR 36.716-03-01: CA\_2-7-26**

*Type: pCR For: Approval  
 36.716-03-01 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000178 TP to TR 36.716-03-01: CA\_2-26-66**

*Type: pCR For: Approval  
 36.716-03-01 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000179 TP to TR 36.716-03-01: CA\_7-26-66**

*Type: pCR For: Approval  
 36.716-03-01 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000486 TP for TR 36.716-03-01: CA\_1-20-38**

*Type: pCR For: Approval  
 36.716-03-01 v0.5.0  
 Source: ZTE Corporation*

**Discussion:**

.

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

### 7.4 LTE inter-band Carrier Aggregation for x bands DL (x=4, 5) with 1 band UL [LTE\_CA\_R16\_xBDL\_1BUL]

#### 7.4.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_xBDL\_1BUL-Core]

**R4-2000174 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 v16.4.0 CR-5591 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This is a big CR for the basket work item on LTE CA 4DL/1UL and 5DL/1UL.

**Discussion:**

.

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

**R4-2000329 Revised WI: Rel'16 LTE inter-band CA for x bands DL (x=4, 5) with 1 band UL**

*Type: WID revised For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000330 TR 36.716-04-01 v0.8.0**

*Type: draft TR For: Approval  
 36.716-04-01 v0.8.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000331 Updated scope of TR: Rel'16 LTE inter-band CA for x bands DL (x=4, 5) with 1 band UL**

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

**Discussion:**

.

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

#### 7.4.2 UE RF with 4 LTE bands CA [LTE\_CA\_R16\_xBDL\_1BUL-Core]

**R4-2000180 TP to TR 36.716-04-01: CA\_2-7-26-66**

*Type: pCR For: Approval  
 36.716-04-01 v0.7.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000187 TP to TR 36.716-04-01: Correction of BCS for CA\_1A-3C-7A-28A**

*Type: pCR For: Approval  
 36.716-04-01 v0.7.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

**R4-2000188 TP to TR 36.716-04-01: Correction of BCS for CA\_2A-7A-7A-29A-66A**

*Type: pCR For: Approval  
 36.716-04-01 v0.7.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

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

#### 7.4.3 UE RF with 5 LTE bands CA [LTE\_CA\_R16\_xBDL\_1BUL-Core]

### 7.5 LTE inter-band Carrier Aggregation for 2 bands DL with 2 band UL [LTE\_CA\_R16\_2BDL\_2BUL]

#### 7.5.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_2BDL\_2BUL-Core]

**R4-2002027 Revised WID for LTE inter-band CA for 2 bands DL with 2 bands UL**

*Type: WID revised For: Agreement  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 7.5.2 UE RF with harmonic, close proximity and isolation issues [LTE\_CA\_R16\_2BDL\_2BUL-Core]

#### 7.5.3 UE RF without specific issues [LTE\_CA\_R16\_2BDL\_2BUL-Core]

### 7.6 LTE inter-band Carrier Aggregation for x bands DL (x= 3, 4, 5) with 2 band UL [LTE\_CA\_R16\_xBDL\_2BUL]

#### 7.6.1 Rapporteur Input (WID/TR/CR) [LTE\_CA\_R16\_xBDL\_2BUL-Core]

**R4-2001040 TR 36.716-03-02 v0.9.0 update: LTE-A x bands DL (x=3,4,5) with 2 bands UL inter-band CA in Rel-16**

*Type: draft TR For: Approval  
 36.716-03-02 v0.9.0  
 Source: LG Electronics France*

**Discussion:**

.

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

**R4-2001041 Revised WID on LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL in Rel-16**

*Type: WID revised For: Agreement  
 Source: LG Electronics France*

**Discussion:**

.

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

**R4-2001169 Introduction of LTE-A inter-band CA for x bands (x=3,4,5) DL with 2 bands UL into TS36.101**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5597 Cat: B (Rel-16)  
  
 Source: LG Electronics France*

**Discussion:**

.

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

#### 7.6.2 UE RF with MSD [LTE\_CA\_R16\_xBDL\_2BUL-Core]

**R4-2001237 TP on summary of self-interference analysis for new x bands (x=3,4,5) DL with 2 bands UL**

*Type: pCR For: Approval  
 36.716-03-02 v0.9.0  
 Source: LG Electronics Finland*

**Discussion:**

.

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

**R4-2001238 MSD results for new LTE-A CA band combinations in rel-16**

*Type: pCR For: Approval  
 36.716-03-02 v0.9.0  
 Source: LG Electronics Finland*

**Discussion:**

.

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

#### 7.6.3 UE RF without MSD [LTE\_CA\_R16\_xBDL\_2BUL-Core]

### 7.7 RRM for LTE CA basket WI-s [LTE\_CA\_R16\_xxxx]

#### 7.7.1 RRM Core (36.133) [LTE\_CA\_R16\_xxxx-Core]

#### 7.7.2 RRM Perf (36.133) [LTE\_CA\_R16\_xxxx-Perf]

### 7.8 Additional LTE bands for UE category M1 and/or NB1 in Rel-16 [LTE\_bands\_R16\_M1\_NB1]

#### 7.8.1 RF [LTE\_bands\_R16\_M1\_NB1-Core]

#### 7.8.2 Others [LTE\_bands\_R16\_M1\_NB1-Perf]

### 7.9 Additional LTE bands for UE category M2 and/or NB2 in in Rel-16 [LTE\_bands\_R16\_M2\_NB2]

#### 7.9.1 RF [LTE\_bands\_R16\_M2\_NB2-Core]

#### 7.9.2 Others [LTE\_bands\_R15\_M2\_NB2-Perf]

### 7.10 Additional MTC enhancements for LTE [LTE\_eMTC5]

#### 7.10.1 General [LTE\_eMTC5]

**R4-2000726 On RRM performance aspects of R16 MTC**

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

**Discussion:**

.

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

**R4-2001751 Discussions on performance requirements for Rel-16 MTC**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution contains initial discussions on performance requirements for MTC.

**Discussion:**

.

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

#### 7.10.2 Coexistence with NR [LTE\_eMTC5]

**R4-2001127 TP for TR 37.823: Specific aspects for TDD**

*Type: other For: Agreement  
 Source: Huawei Technologies R&D UK*

**Abstract:**

This paper proposes TP on specific aspects for TDD to TR 37.823.

**Discussion:**

.

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

**R4-2001862 TR 37.823 LTE-M coexisting with NR v 0.2.0**

*Type: draft TR For: Approval  
 37.823 v0.3.0  
 Source: Ericcson*

**Abstract:**

in this paper, the TR 37.823 is udpated

**Discussion:**

.

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

**R4-2001863 TP for TR 37.823 : R16 RAN1 impact on co-existing**

*Type: pCR For: Approval  
 37.823 v0.3.0  
 Source: Ericsson*

**Abstract:**

TP is proposed for TR38.823 capture the R16 RAN1 impact

**Discussion:**

.

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

**R4-2001864 R16 RAN1 impact on co-existing**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

RAN1 impact is analysed in this paper

**Discussion:**

.

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

#### 7.10.3 RRM core requirements (36.133) [LTE\_eMTC5-Core]

##### 7.10.3.1 DL quality report in MSG3 and connected mode [LTE\_eMTC5-Core]

**R4-2001349 Discussion on the remaining issues on DL quality report for eMTC**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues for DL channel quality report for eMTC.

**Discussion:**

.

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

**R4-2001649 Discussion on quality reporting in Rel-16 eMTC**

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

**Discussion:**

.

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

**R4-2001650 CR on MPDCCH parameters for quality reporting**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6810 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 7.10.3.2 WUS [LTE\_eMTC5-Core]

**R4-2001651 CR to introduce WUS reception requirements for Rel-16 eMTC**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6811 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001750 CR: WUS**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6818 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR contains changes related to receiving multiple sequences of WUS.

**Discussion:**

.

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

##### 7.10.3.3 MPDCCH performance improvement [LTE\_eMTC5-Core]

**R4-2000727 Simulation results for MPDCCH performance improvements of RLM tests in MTC**

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

**Discussion:**

.

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

**R4-2001350 Discussion on RLM with MPDCCH improvement**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses the RLM requirements due to the MPDCCH performance improvement.

**Discussion:**

.

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

##### 7.10.3.4 PUR [LTE\_eMTC5-Core]

**R4-2001652 CR on measurement requriements for RSRP change based TA validation**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6812 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001748 CR: PUR**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6816 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces the support for transmissions using preconfigured uplink resources.

**Discussion:**

.

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

**R4-2001749 CR: RA**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6817 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR contains changes related to performing RA using RSS based RSRP measurements.

**Discussion:**

.

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

##### 7.10.3.5 Mobility enhancement [LTE\_eMTC5-Core]

**R4-2000728 On RSS-based measurement in connected mode in eMTC**

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

**Discussion:**

.

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

**R4-2001653 Discussion on remaining issues in RSS measurement**

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

**Discussion:**

.

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

**R4-2001746 RSS based measurement simulation results and discussions**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we discuss the remaining issues of RSS based measurements.

**Discussion:**

.

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

**R4-2001747 CR: RSS based measurement simulation results and discussions**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6815 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR introduces support for RSS based RSRPmeasurements for cat-M.

**Discussion:**

.

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

##### 7.10.3.6 Others [LTE\_eMTC5-Core]

#### 7.10.4 Demodulation and CSI requirements (36.101/36.104) [LTE\_eMTC5-Perf]

**R4-2000311 View on BS demodulation requirement for LTE additional enhancement for eMTC**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

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

**R4-2001351 Open issues on UE/BS demodulation requirements for Rel-16 eMTC**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues for UE/BS demodulation requirements for Rel-16 eMTC.

**Discussion:**

.

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

**R4-2001352 Discussion on UE demodulation and CSI reporting requirements for Rel-16 BL/CE UE**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the test setup of improved MPDCCH demodulation requirements and CSI-RS based PMI reporting requirements.

**Discussion:**

.

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

**R4-2001479 Discussion on BS performance requirements for additional MTC enhancements for LTE**

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

**Abstract:**

Discuss and give our proposals on open issues

**Discussion:**

.

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

**R4-2001480 Discussion on UE performance requirements for additional MTC enhancements for LTE**

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

**Abstract:**

Discuss and give our proposals on open issues

**Discussion:**

.

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

**R4-2001481 Discussion on initial simulation assumption for MPDCCH of LTE eMTC**

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

**Abstract:**

Give our initial simulation assumptions proposal for MPDCCH

**Discussion:**

.

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

**R4-2001482 Discussion on initial simulation assumption for CSI reporting of LTE eMTC**

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

**Abstract:**

Give our initial simulation assumptions for CSI reporting of LTE eMTC

**Discussion:**

.

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

**R4-2001915 UE and BS demodulation requirements for LTE\_eMTC5**

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

**Abstract:**

Discussion on open issues from RAN4 #93.

**Discussion:**

.

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

### 7.11 Additional enhancements for NB-IoT [NB\_IOTenh3]

#### 7.11.1 General [NB\_IOTenh3]

**R4-2000729 On RRM performance aspects of R16 NB-IoT**

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

**Discussion:**

.

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

#### 7.11.2 Co-existence with NR [NB\_IOTenh3]

**R4-2000670 TP to TR 37.824: Update of NR TDD UE specific dedicated configuration**

*Type: pCR For: Approval  
 37.824 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell, ZTE*

**Abstract:**

This contribution provides a TP to update TR 37.824 to use the current NR TDD UE specific dedicated configuration for testing NB-IoT operation in NR in-band, to avoid defining two very similar NR TDD UE specific dedicated configurations in the test specif

**Discussion:**

.

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

**R4-2000671 CR to TS 38.104: Corrections on NB-IoT operation in NR channel bandwidth**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0132 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the identified errors.

1) Correct the typo in clause 6.2.2.

2) Clarify the requirement only apply for NB-IoT operation in NR in-band and correct the typo in clause 6.3.4.

3) Remove the term ‘NR and NR with NB-IoT’ which is redundant and not used i

**Discussion:**

.

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

**R4-2000672 CR to TS 38.141-1: Introduction of NB-IoT operation in NR channel bandwidth**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0093 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduce support of NB-IoT operation in NR channel bandwidth.

**Discussion:**

.

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

**R4-2000683 TP to TR 37.824: Update of NR TDD UE specific dedicated configuration**

*Type: pCR For: Approval  
 37.824 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell, ZTE*

**Abstract:**

This contribution provides a TP to update TR 37.824 to use the current NR TDD UE specific dedicated configuration for testing NB-IoT operation in NR in-band, to avoid defining two very similar NR TDD UE specific dedicated configurations in the test specif

**Discussion:**

.

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

**R4-2000684 CR to TS 38.104: Corrections on NB-IoT operation in NR channel bandwidth**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0135 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct the identified errors.

1) Correct the typo in clause 6.2.2.

2) Clarify the requirement only apply for NB-IoT operation in NR in-band and correct the typo in clause 6.3.4.

3) Remove the term ‘NR and NR with NB-IoT’ which is redundant and not used i

**Discussion:**

.

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

**R4-2000685 CR to TS 38.141-1: Introduction of NB-IoT operation in NR channel bandwidth**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0098 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduce support of NB-IoT operation in NR channel bandwidth.

**Discussion:**

.

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

**R4-2000699 Draft TR 37.824 v040 Coexistence between NB-IoT and NR**

*Type: draft TR For: Approval  
 37.824 v0.4.0  
 Source: Futurewei*

**Abstract:**

Draft TR 37.824 v0.4.0

**Discussion:**

.

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

**R4-2000700 TP editorial corrections in TR 37.824**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

TP editorial corrections

**Discussion:**

.

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

**R4-2000816 Test Configuration for TS 38.141**

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

**Discussion:**

.

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

**R4-2000817 Test Configuration for TS 37.141**

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

**Discussion:**

.

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

**R4-2000875 TP to TR 37.824: modifications for section 5.3 NB-IoT operating in NR guard-band**

*Type: pCR For: Approval  
 37.824 v0.3.0  
 Source: CHTTL, T-mobile USA, Dish*

**Discussion:**

.

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

**R4-2000970 Introduction of NB-IoT into TS37.141**

*Type: CR For: Agreement  
 37.141 v16.4.0 CR-0922 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

#### 7.11.3 RRM core requirements (36.133) [NB\_IOTenh3-Core]

##### 7.11.3.1 Group WUS [NB\_IOTenh3-Core]

##### 7.11.3.2 PUR [NB\_IOTenh3-Core]

**R4-2001550 CR on measurement requriements for RSRP change based TA validation**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6802 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

##### 7.11.3.3 Multi-carrier operations [NB\_IOTenh3-Core]

**R4-2000730 Remaining issues on RRM measurements in non-anchor carrier for NB-IoT**

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

**Discussion:**

.

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

**R4-2001551 CR on non-anchor RRM measurement requirements in Rel-16 NB IoT**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6803 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001552 Discussion on the non-anchor RRM measurement requirements Rel-16 NB IoT**

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

**Discussion:**

.

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

**R4-2001752 Remaining discussions on non-anchor carrier RRM measurements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we discuss the open issues of non-anchor carrier RRM measurements.

**Discussion:**

.

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

**R4-2001917 On NRSRP processing in multicarrier operation**

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

**Abstract:**

Discussion on combining and filtering of NRSRP in MC operation.

**Discussion:**

.

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

##### 7.11.3.4 Others [NB\_IOTenh3-Core]

**R4-2001553 Discussion on the TA offset setting for NR and NB-IoT coexistence**

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

**Discussion:**

.

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

#### 7.11.4 Demodulation and CSI requirements (36.101/36.104) [NB\_IOTenh3-Perf]

**R4-2000312 View on BS demodulation requirement for LTE additional enhancement for NB IoT**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

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

**R4-2001353 Open issues on UE/BS demodulation requirements for Rel-16 NB-IoT**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues for UE/BS demodulation requirements for Rel-16 NB-IoT.

**Discussion:**

.

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

**R4-2001461 Discussion on NPDSCH performance requirements for additional enhancements for NB-IOT**

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

**Abstract:**

Give our discussion on performance requirement for Rel-16 NPDSCH

**Discussion:**

.

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

**R4-2001462 Discussion on NPUSCH performance requirements for additional enhancements for NB-IOT**

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

**Abstract:**

Give our discussion on performance requirement for Rel-16 NPUSCH

**Discussion:**

.

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

**R4-2001916 UE and BS demodulation requirements for NB\_IOTenh3**

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

**Abstract:**

Discussion on open issues from RAN4 #93.

**Discussion:**

.

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

### 7.12 Even further Mobility enhancement in E-UTRAN [LTE\_feMob]

#### 7.12.1 RRM core requirements (36.133) [LTE\_feMob-Core]

##### 7.12.1.1 Conditional handover [LTE\_feMob-Core]

**R4-2001336 Conditional handover for LTE**

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

**Discussion:**

.

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

**R4-2001411 Open issues for NR conditional handover**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

CR to conclude remaining open issues

**Discussion:**

.

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

**R4-2001412 TP:Update to conditional handover requirements for LTE**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

TP on changes to conclude remaining open issues

**Discussion:**

.

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

**R4-2001839 Correction to HO delay requirements for conditional HO**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6819 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

This CR implements some editorial corrections and additions on the initial version

**Discussion:**

.

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

##### 7.12.1.2 Reduction of user data interruption [LTE\_feMob-Core]

**R4-2001409 Remaining open issues on DAPS handover for LTE**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discuss remaining open issues for DAPS

**Discussion:**

.

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

**R4-2001410 TP:Update to DAPS handover requirements for LTE**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

TP on changes to conclude remaining open issues

**Discussion:**

.

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

**R4-2001670 CR on DAPS handover**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6814 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2001840 Corrections to LTE DAPS HO requirements**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6820 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

This CR implements some editorial and technical corrections missin from the initial version

**Discussion:**

.

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

##### 7.12.1.3 Others [LTE\_feMob-Core]

### 7.13 Further performance enhancement for LTE in high speed scenario [LTE\_high\_speed\_enh2]

#### 7.13.1 RRM core requirements maintenance (36.133) [LTE\_high\_speed\_enh2-Core]

**R4-2000641 draft CR on correction of measurement delay requirements for LTE HST in TS36.133**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6794 Cat: F (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

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

**R4-2000873 CR to TS 36.133: Finalization on RRM requirements for Rel-16 LTE HST**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6796 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

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

#### 7.13.2 RRM performance requirements (36.133) [LTE\_high\_speed\_enh2-Perf]

#### 7.13.3 UE Demodulation and CSI requirements (36.101) [LTE\_high\_speed\_enh2-Perf]

**R4-2000872 CR to TS 36.101: Finalization on PDSCH demodulation with 500km/h velocity**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5596 Cat: F (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

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

##### 7.13.3.1 Extension of demodulation requirements to CA [LTE\_high\_speed\_enh2-Perf]

**R4-2001348 Finalization of CA PDSCH demodulation requirements with HST-SFN**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5598 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR mainly removes the square brackets to complete the PDSCH demodulation requirements with CA under HST-SFN.

**Discussion:**

.

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

##### 7.13.3.2 HST-SFN PDSCH demodulation requirements [LTE\_high\_speed\_enh2-Perf]

##### 7.13.3.3 Single tap HST PDSCH demodulation requirements [LTE\_high\_speed\_enh2-Perf]

#### 7.13.4 BS Demodulation requirements (36.104) LTE\_high\_speed\_enh2-Perf]

##### 7.13.4.1 PUSCH demodulation requirements [LTE\_high\_speed\_enh2-Perf]

**R4-2000309 Simulation results summary of BS demodulation requirement for LTE Rel-16 HST**

*Type: other For: Information  
 Source: Samsung*

**Discussion:**

.

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

**R4-2000310 Simulation results for HST PUSCH in LTE Rel-16**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

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

**R4-2001452 Simulation results for LTE HST BS demodulation requirements**

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

**Abstract:**

The simulation results provided by companies is not aligned at last meeting. As per simulaition assumptiuon in WF R4-1912777, we resubmit our simulation results for alignment.

**Discussion:**

.

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

**R4-2001720 Discussion on aligning simulation results of PUSCH for Rel-16 LTE HST**

*Type: other For: Discussion  
 36.104 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document has investigated the simulation results for PUSCH for Rel-16 LTE HST provided by different companies in an attempt to align the simulation results and finalize the SNR requirement for Scenario 1-LTE500a/b and Scenario 3-LTE500a/b.

We propo

**Discussion:**

.

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

##### 7.13.4.2 PRACH requirements [LTE\_high\_speed\_enh2-Perf]

**R4-2001718 Discussion on aligning simulation results of PRACH preamble restricted set type B for Rel-16 LTE HST**

*Type: other For: Discussion  
 36.104 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document has examined our contribution to the simulation results for PRACH preamble restricted set type B [2] that were presented at the last meeting in an attempt to uncover errors or discrepancies in the simulation results.

Proposal 1: SNR values

**Discussion:**

.

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

### 7.14 LTE-based 5G terrestrial broadcast [LTE\_terr\_bcast]

#### 7.14.1 RRM core requirements maintenance (36.133) [LTE\_terr\_bcast -Core]

##### 7.14.1.1 Interruption requirements [LTE\_terr\_bcast -Core]

##### 7.14.1.2 Phase synchronization accuracy [LTE\_terr\_bcast -Core]

##### 7.14.1.3 RSRP/RSRQ report mapping [LTE\_terr\_bcast -Core]

##### 7.14.1.4 Other requirements [LTE\_terr\_bcast -Core]

#### 7.14.2 RRM Perf requirements (36.133) [LTE\_terr\_bcast -Perf]

#### 7.14.3 Demodulation and CSI requirements (36.101) [LTE\_terr\_bcast -Perf]

**R4-2000773 On LTE-based 5G terrestrial broadcast demod requirement**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

PMCH and CAS demod requirement

**Discussion:**

.

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

**R4-2001453 Discussion on the performance requirement for LTE-based 5G terrestrial broadcast**

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

**Abstract:**

As per Work plan R4-1911284, provide our view about test scope and simulation assumption on LTE based 5G terrestrial broadcast.

**Discussion:**

.

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

### 7.15 Support for NavIC Navigation Satellite System for LTE [LCS\_NAVIC-Perf]

**R4-2000071 CR of TS 36.171 for introducing NavIC in LTE – performance part**

*Type: CR For: Agreement  
 36.171 v15.0.0 CR-0017 Cat: B (Rel-16)  
  
 Source: RAN4*

**Abstract:**

In RAN#85, LCS\_NAVIC work item was approved for A-GNSS suport for NavIC constellation in LTE Release-16. This change request captures the minimum performance requirements expected from GNSS receivers supporting NavIC constellation.

**Discussion:**

.

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

#### 7.15.1 UE perf. requirements (36.171) [LCS\_NAVIC-Perf]

### 7.16 DL MIMO efficiency enhancements for LTE [LTE\_DL\_MIMO\_EE]

**R4-2002039 On new SRS requirements for LTE eMIMO**

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

**Discussion:**

.

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

**R4-2002040 CR for TS 36.101-1 Introduction of new SRS requirements for LTE eMIMO**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5602 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

#### 7.16.1 UE RF requirements (36.101) [LTE\_DL\_MIMO\_EE]

## 8 Rel-16 non-spectrum related work items for NR

### 8.1 NR-based access to unlicensed spectrum [NR\_unlic]

#### 8.1.1 System Parameters [NR\_unlic-Core]

##### 8.1.1.1 General [NR\_unlic-Core ]

**R4-2001318 Additional NR CA bandwidth classes and specification of CA carrier spacing for NR-U**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose additinal NR CA bandwidth classes for NR-U and the associated CA nominal carrier spacing

**Discussion:**

.

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

**R4-2001958 draftCR to 38.104 on introduction of band n46**

*Type: draftCR For: Endorsement  
 38.104 v16.2.0  
 Source: Ericsson*

**Abstract:**

contribution on introduction of band n46 in 38.104 for NR-U operation

**Discussion:**

.

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

**R4-2001959 draftCR to 38.101-1 on introduction of band n46**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Ericsson*

**Abstract:**

contribution on introduction of band n46 in 38.101-1 for NR-U operation

**Discussion:**

.

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

##### 8.1.1.2 Wideband operations (UE and BS) [NR\_unlic-Core]

**R4-2000709 [NRU] Wideband Operation Back-off Measurements for UE**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

wideband operation mask including exceptions for image and carrier leakage is agreed, we did wideband operation measurements to verify the potential back-off needs due to the mask and combination of image and spectral regrowth that are presented here.

**Discussion:**

.

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

**R4-2000818 Further consideration on guard band on wideband operation**

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

**Discussion:**

.

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

**R4-2000819 Further consideration on unwanted emission mask for NR-U**

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

**Discussion:**

.

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

**R4-2000981 Further discussion on intra-carrier guardband**

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

**Discussion:**

.

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

**R4-2001306 NR-U - Capturing the Spectral Emission Mask**

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

**Discussion:**

.

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

**R4-2001319 The NR-U channel raster and allowed intra-cell GB for wideband operation**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose that the agreed channel raster is unchanged (up to 200 kHz shift not needed for coexistence) and that coexistence scenarios can be managed by the intra-cell guard bands.

**Discussion:**

.

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

**R4-2001320 Nominal intra-cell guard bands for wideband operation**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Ericsson*

**Abstract:**

Draft CR to introduce nominal intra-cell guard bands for wideband operation and specification of the requirements when these guard bands are not configured

**Discussion:**

.

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

**R4-2001732 NR-U Guard band analysis**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

In RAN4#93, discussions about guard band for NR-U were captured. In particular, when a large bandwidth channel is divided into subchannels, how to define the subchannels in terms of RBs was proposed. This contribution analyzes the proposal and provides en

**Discussion:**

.

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

##### 8.1.1.3 Channel raster [NR\_unlic-Core ]

##### 8.1.1.4 Spectrum utilizations [NR\_unlic-Core]

**R4-2000820 Draft CR to 38.104 on NR-U Spectrum Utilization**

*Type: draftCR For: Endorsement  
 38.104 v16.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

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

**R4-2000967 NR-U Spectral Utilization and Wideband Operation**

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

**Abstract:**

This paper discusses the open issues in the WF on guardbands from previous RAN4 meeting and also proposes some clarifications to the agreements in the WF

**Discussion:**

.

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

##### 8.1.1.5 Sync raster [NR\_unlic-Core]

**R4-2001731 Sync raster design for NR-U**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

In RAN4#93, a draft CR listing the synchronization raster points for 38.104 was endorsed. It was expected that an accompanying CR for 38.101-1 would be provided for RAN4#94. One open issue was the type of “SS block pattern” to be listed in the table. This

**Discussion:**

.

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

#### 8.1.2 UE RF requirements [NR\_unlic-Core]

**R4-2000190 [DC] TP for DC\_n48-n46**

*Type: TS or TR cover For: Approval  
 37.716-11-11 v0.1.0  
 Source: Charter Communications*

**Discussion:**

.

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

**R4-2000191 TP for CA\_n48-n46**

*Type: TS or TR cover For: Approval  
 38.716-02-00 v0.8.0  
 Source: Charter Communications*

**Discussion:**

.

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

**R4-2001222 Harmonic MSD discussion for DC\_2\_n46, CA\_n25\_n46**

*Type: other For: Approval  
 38.101-1 v..  
 Source: MediaTek Inc., Ericsson*

**Discussion:**

.

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

**R4-2001712 Standalone NR-U combinations in Rel-16**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution, we propose some of the relevant requirements for standalone NR-U and propose to approve the related TP

**Discussion:**

.

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

**R4-2001713 Draft CR on Introduction of standalone NR-U combinations in Rel-16**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Ericsson*

**Abstract:**

In this draft CR, we propose some of the relevant requirements for standalone NR-U and propose to approve the related TP

**Discussion:**

.

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

**R4-2001714 TP on Inclusion of NR-U standalone combinations in TR 38 716-01-01:**

*Type: other For: Approval  
 38.716-01-01 v..  
 Source: Ericsson*

**Abstract:**

In this contribution, we propose some of the relevant requirements for standalone NR-U and propose to approve the related TP

**Discussion:**

.

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

**R4-2002019 TP to include CA\_n25A-n46A**

*Type: pCR For: Approval  
 38.716-02-00 v0.8.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP to include CA\_n25A-n46A

**Discussion:**

.

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

**R4-2002020 TP to include CA\_n46A-n66A**

*Type: pCR For: Approval  
 38.716-02-00 v0.8.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP to include CA\_n46A-n66A

**Discussion:**

.

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

**R4-2002021 TP to include DC\_2A\_n46A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP to include DC\_2A\_n46A

**Discussion:**

.

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

**R4-2002022 TP to include DC\_66A\_n46A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP to include DC\_66A\_n46A

**Discussion:**

.

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

**R4-2002023 CR 38.101-1 to include NR CA NR-U combinations**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0272 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-1 to include NR CA NR-U combinations

**Discussion:**

.

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

**R4-2002024 CR 38.101-3 to include EN-DC NR-U combinations**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0214 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR 38.101-3 to include EN-DC NR-U combinations

**Discussion:**

.

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

##### 8.1.2.1 Transmitter characteristics [NR\_unlic-Core]

**R4-2000399 On NR-U ACLR requirement**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000708 [NRU] Single Carrier Back-off measurements for UE power class and MPR**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

NRU spectrum mask was agreed in [2], to define the NRU UE power class and MPR we have performed more measurements on UE WiFi PAs that are presented here.

**Discussion:**

.

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

**R4-2001321 Initial simualtions of required MPR and A-MPR for 5 GHz NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we present initial simulation results of required MPR and A-MPR for 5 GHz NR-U

**Discussion:**

.

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

**R4-2002094 NR-U MPR for PC5 single carrier**

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

**Discussion:**

.

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

**R4-2002095 NR-U general and Band n46 specific Tx requirements**

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

**Discussion:**

.

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

##### 8.1.2.2 Receiver characteristics [NR\_unlic-Core]

**R4-2002092 Band n46 reference sensitivity**

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

**Discussion:**

.

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

**R4-2002093 NR-U receiver ACS and blocking**

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

**Discussion:**

.

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

#### 8.1.3 BS RF requirements [NR\_unlic-Core]

**R4-2000985 CR for NR-U RX requirement**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0140 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

##### 8.1.3.1 Transmitter characteristics [NR\_unlic-Core]

##### 8.1.3.2 Receiver characteristics [NR\_unlic-Core]

**R4-2000821 NR-U BS REFSENS**

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

**Discussion:**

.

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

**R4-2000822 NR-U BS dynamic range**

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

**Discussion:**

.

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

**R4-2000982 simulation results for NR-U BS RX FRC**

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

**Discussion:**

.

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

**R4-2000983 NR-U BS RX REFSENS and dynamic range requirement**

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

**Discussion:**

.

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

**R4-2000984 NR-U BS RX ICS requirement**

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

**Discussion:**

.

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

**R4-2001463 Discussion and simulation results for NR-U BS REFSENS/ICS**

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

**Abstract:**

Share our simulation results for NR-U BS REFSENS/ICS as per the agreed simulation assumptions in R4-1916162.

**Discussion:**

.

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

**R4-2001464 Discussion and simulation results for NR-U BS Dynamic range**

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

**Abstract:**

Share our simulation results for NR-U BS Dynamic range as per the agreed simulation assumptions in R4-1916162.

**Discussion:**

.

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

**R4-2001465 Discussion on FRC definition for NR-U BS REFSENS and Dynamic range**

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

**Abstract:**

As per RAN1 agreements about the interlace structure, this contribution share our view on the FRC definition for NR-U BS REFSENS and Dynamic range

**Discussion:**

.

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

**R4-2001674 NR-U BS receiver requirements**

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

**Discussion:**

.

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

**R4-2001675 Summary of simulation results for NR-U BS Rx FRC**

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

**Discussion:**

.

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

**R4-2001727 Update to NR-U FRC definition**

*Type: other For: Approval  
 38.104 v..  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

During RAN4#93, interested companies defined the new NR-U BS RX simulation assumptions needed for input towards new FRC(s) to be defined. The FRC parameters will differ for NR-U compared to NR due to interleaving aspects for NR-U compared to that of NR.

**Discussion:**

.

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

**R4-2001728 NR-U BS RX Simulation Results**

*Type: other For: Discussion  
 38.104 v..  
 Source: Ericsson*

**Abstract:**

Initial simulation results based on updated FRC parameters defined in [1]

**Discussion:**

.

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

#### 8.1.4 RRM core requirements (38.133) [NR\_unlic-Core]

**R4-2000039 CR for spec structure to address NR-U in 38.133 v2**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0410 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000040 Discussion on approaches to address NR-U in 36.133 and 38.133 v2**

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

**Discussion:**

.

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

##### 8.1.4.1 Cell re-selection [NR\_unlic-Core]

**R4-2000392 Discussion on SIB reading impacts on cell reselection requirements of NR-U**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2000714 Remaining issues on cell reselection in NR-U**

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

**Discussion:**

.

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

**R4-2000924 Discussion on cell reselection requirement for NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000925 Simulation results for SI reading**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001438 On Cell-reselection requirements in NR-U**

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

**Abstract:**

Remaining issues on cell-reselection in NR-U

**Discussion:**

.

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

**R4-2001554 Discussion on cell re-selection for NR-U**

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

**Discussion:**

.

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

**R4-2001741 Remaining discussions on IDLE mode cell re-selection requirements for NR-U standalone**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we discuss the cell re-selection requirements for standalone, and more specifically how (if) they are affected by the LBT by taking into account the above agreements.

**Discussion:**

.

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

**R4-2001742 Draft CR: NR-U requirements for IDLE/INACTIVE states**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: Ericsson*

**Abstract:**

Draft CR showing how the new IDLE mode agreements are to be captured.

**Discussion:**

.

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

**R4-2001743 NR-U inter-RAT requirements for IDLE/INACTIVE states**

*Type: other For: Approval  
 38.133 v..  
 Source: Ericsson*

**Abstract:**

CR for capturing the inter-RAT requirements in IDLE/INACTIVE states.

**Discussion:**

.

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

**R4-2001744 Remaining discussions on serving cell evaluations for NR-U standalone**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we discuss the serving cell requirements for standalone, and more specifically how (if) they are affected by the LBT.

**Discussion:**

.

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

**R4-2001745 Discussions on paging interruptions for NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we discuss the handover requirements for NR-U.

**Discussion:**

.

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

**R4-2001914 NR-U inter-RAT requirements for IDLE/INACTIVE states**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0562 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR for capturing the inter-RAT requirements in IDLE/INACTIVE states.

**Discussion:**

.

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

##### 8.1.4.2 Handover [NR\_unlic-Core]

**R4-2000393 Further discussion on HO requirements of NR-U**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

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

**R4-2001440 Discussion on HO requirements in NR-U**

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

**Abstract:**

This document discusses HO requirements in NR-U.

**Discussion:**

.

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

**R4-2001555 Discussion on handover in NR-U**

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

**Discussion:**

.

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

**R4-2002132 Discussion regarding NR-U handover**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

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

##### 8.1.4.3 RRC connection mobility control [NR\_unlic-Core]

**R4-2000047 Discussion on UE behavior in RRC release with re-direction in NR-U**

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

**Discussion:**

.

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

**R4-2000048 Discussion on UE behavior in RRC re-establishment in NR-U**

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

**Discussion:**

.

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

**R4-2000049 Discussion on SIB reading in RRC procedures NR-U**

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

**Discussion:**

.

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

**R4-2000926 Discussion on RRC Re-establishment requirement for NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001359 SIB1 acquisition time in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses SIB1 acquisition delay.

**Discussion:**

.

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

**R4-2001442 Discussion on the SI acquisition time in NR-U**

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

**Abstract:**

This document discusses the SI acquisition time in NR-U.

**Discussion:**

.

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

**R4-2001556 Discussion on RRC connection mobility control in NR-U**

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

**Discussion:**

.

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

**R4-2001846 Analysis of open issues in RRC re-establishment in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper addresses open issues for maximum allowed CCA failures in RRC re-estabishment

**Discussion:**

.

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

**R4-2001847 Analysis of open issues in RRC re-direction in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper addresses open issues for maximum allowed CCA failures in RRC re-redirection

**Discussion:**

.

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

**R4-2002133 Discussion regarding NR-U RRC Mobility Control**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

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

##### 8.1.4.4 SCell activation/deactivation (delay and interruption) [NR\_unlic-Core]

**R4-2000057 Discussion on SCell activation delay in NR-U**

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

**Discussion:**

.

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

**R4-2000715 On Scell activation and deactivation requirements in NR-U**

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

**Discussion:**

.

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

**R4-2001557 Discussion on SCell activation in NR-U**

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

**Discussion:**

.

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

**R4-2001841 Introduction of activation and deactivation delay requirements for SCells operating with CCA**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0559 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

This CR introduces Scell activation/deactivation requirements for NR-U

**Discussion:**

.

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

**R4-2001930 On SCell activation delay in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On SCell activation delay in NR-U

**Discussion:**

.

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

##### 8.1.4.5 PSCell addition/release (delay and interruption) [NR\_unlic-Core]

**R4-2000058 Discussion on PSCell addition delay in NR-U**

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

**Discussion:**

.

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

**R4-2000716 On PSCell addition and release requirements in NR-U**

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

**Discussion:**

.

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

**R4-2000927 Discussion on PSCell addition for NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001558 Discussion on PSCell addition and release in NR-U**

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

**Discussion:**

.

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

**R4-2001842 Introduction of addition and release of NR PSCell operating with CCA in EN-DC**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6821 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

This CR introduces PSCell addition/release requirements for NR-U

**Discussion:**

.

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

**R4-2001932 On PSCell addition/release requirements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On PSCell addition/release requirements in NR-U

**Discussion:**

.

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

##### 8.1.4.6 Active TCI state switching [NR\_unlic-Core]

**R4-2000717 On active TCI switching requirements in NR-U**

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

**Discussion:**

.

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

**R4-2000928 Discussion on TCI switch requirement for NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001559 Discussion on Active TCI state switching in NR-U**

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

**Discussion:**

.

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

**R4-2001931 On active TCI state switching requirements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On active TCI state switching requirements in NR-U

**Discussion:**

.

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

##### 8.1.4.7 Interruptions due to operation in non-NR-U serving cells [NR\_unlic-Core]

**R4-2001395 Updates to SA NR interruption requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0498 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to update SA interruption requirements

**Discussion:**

.

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

##### 8.1.4.8 Active BWP switching [NR\_unlic-Core]

**R4-2001560 Discussion on Active BWP switching in NR-U**

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

**Discussion:**

.

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

**R4-2001848 Analysis of BWP switching requirement due to consistent UL failure**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper provides analysis of requirements for BWP switching in NR-U under consistent LBT failures

**Discussion:**

.

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

**R4-2001849 BWP switching requirement due to consistent UL failure in 38.133**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: Ericsson*

**Abstract:**

Draft CR on requirements for BWP switching in NR-U under consistent LBT failures

**Discussion:**

.

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

**R4-2001850 Interruption due to BWP switching at consistent UL failure in 36.133**

*Type: draftCR For: Endorsement  
 36.133 v16.4.0  
 Source: Ericsson*

**Abstract:**

Draft CR on interruption requirements for BWP switching in NR-U under consistent LBT failures

**Discussion:**

.

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

##### 8.1.4.9 RLM and link recovery procedures [NR\_unlic-Core]

**R4-2000050 Discussion on RLM in NR-U**

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

**Discussion:**

.

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

**R4-2000929 Discussion on RLM requirement for NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000987 On RLM requirement for NR-U**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

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

**R4-2001360 Beam management in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the BFD and CBD requirements in NR-U.

**Discussion:**

.

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

**R4-2001439 On RLM requirements in NR-U**

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

**Abstract:**

Remaining issues on RLM requirements in NR-U

**Discussion:**

.

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

**R4-2001561 Discussion on RLM and link recovery in NR-U**

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

**Discussion:**

.

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

**R4-2001933 On RLM in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On RLM in NR-U

**Discussion:**

.

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

**R4-2001934 Introduction of RLM requirements for NR-U**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0566 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Introduction of RLM requirements for NR-U

**Discussion:**

.

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

**R4-2002130 RLM and Link Recovery Procedure in NR-U**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

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

##### 8.1.4.10 Measurement requirements [NR\_unlic-Core]

**R4-2000041 CR to address NR-U in EN-DC SFTD measurements in 36.133 v2**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6792 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

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

**R4-2000042 Discussion on inter-RAT SFTD measurement towards NR-U**

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

**Abstract:**

This paper discusses some pending issues in inter-RAT SFTD measurement in NR-U.

**Discussion:**

.

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

**R4-2000043 CR to address NR-U in inter-RAT SFTD measurements in 36.133**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6793 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

This CR needs to be revised according to outcome of online discussion in Athens meeting.

**Discussion:**

.

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

**R4-2000044 [draft] LS on inter-RAT SFTD delay for NR-U**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE Corporation*

**Abstract:**

This LS tends to inform RAN2 the potential issues on inter-RAT SFTD reporting delay requirement for NR-U.

**Discussion:**

.

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

**R4-2000718 Remaining issues on measurement requirements in NR-U**

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

**Discussion:**

.

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

**R4-2000719 Draft LS on RSSI measurements in NR-U**

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

**Discussion:**

.

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

**R4-2000720 On RSSI and CO measurements in NR-U**

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

**Discussion:**

.

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

**R4-2000780 Remaining issues on cell detection and serving cell measurement for NR-U**

*Type: other For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

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

**R4-2000930 Discussion on measurement on QCL-ed SSBs and measurement capability for NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2000931 Discussion on SFTD measurements towards NR-U with LBT**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

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

**R4-2001361 L1-RSRP measurements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the L1-RSRP measurement requirements in NR-U.

**Discussion:**

.

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

**R4-2001437 On SSB index identification time in NR-U**

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

**Abstract:**

In this document, we discuss the SSB index identification time in NR-U.

**Discussion:**

.

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

**R4-2001441 On The impact of UL LBT failure in measurement reporting in NR-U**

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

**Abstract:**

This document discusses the impact of UL LBT railures in measurement reporting

**Discussion:**

.

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

**R4-2001443 On L1-RSRP measurement requirements in NR-U**

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

**Abstract:**

This document discusses remaining issues in L1-RSRP measurement requirements in NR-U.

**Discussion:**

.

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

**R4-2001562 Discussion on measurement requirement in NR-U**

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

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001804 CR to 38.133 to address NR-U inter-RAT measurements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0558 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This CR addresses the introduction of requirements for NR-U inter-RAT measurements in 38.133

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001929 On RSSI and channel occupancy measurement requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On RSSI and channel occupancy measurement requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001935 On the impact of UL LBT failures on measurement reporting delay**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On the impact of UL LBT failures on measurement reporting delay

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001936 On intra-frequency measurements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On intra-frequency measurements in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001937 On inter-frequency measurements in NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On inter-frequency measurements in NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002086 On inter-RAT SFTD under CCA**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution addressing remaining issues for inter-RAT SFTD measurement under CCA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002087 CR 36.133 (8.1.2.4) Inter-RAT SFTD under CCA**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6824 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Adding inter-RAT SFTD measurement requirements when CCA is used.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.1.4.11 Measurement accuracy [NR\_unlic-Core]

**R4-2000721 On measurements accuracy requirements in NR-U**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.1.4.12 Measurement capability and reporting criteria [NR\_unlic-Core]

**R4-2000045 Discussion on RSSI and CO report mapping for NR-U v2**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Abstract:**

This paper discusses report mapping for RSSI and CO.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000722 On measurement capabilities and reporting criteria**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000932 Discussion on measurement reporting criteria in NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001563 Discussion on measurement capability in NR-U**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001938 On measurement reporting criteria for NR-U**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On measurement reporting criteria for NR-U

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.1.4.13 Timing [NR\_unlic-Core]

**R4-2000046 Discussion on timing reference cell adjustment for NR-U**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000933 Discussion on synchronization assumption and SSB index detection in NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000934 Discussion on timing requirements in NR-U**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001710 Draft CR on UE transmit timing accuracy and timing reference cell under DL LBT failure**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: Ericsson*

**Abstract:**

It has been agreed in RAN4#92bis that [R4-1912846], “UE behavior: The UE is allowed to transmit if the UE meets the existing (Rel-15) UL Tx timing requirements (even if no SSB is available during the last 160 ms), otherwise the UE shall not transmit”.

Thi

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001711 On the timing reference cell adaptation under DL LBT failure in reference cell**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In DL, the BS may experience CCA failure in a carrier and not able to transmit, thus the UE will not be able to see the carrier anymore. In case of PCell or PScell, since these cells are used as timing reference for UL transmissions, if these carriers are

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002131 Discussion regarding NR-U UL timing**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.1.4.14 Others [NR\_unlic-Core]

**R4-2001393 Updates to clause 1-3 (General) for NR-U in 36.133**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0497 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR for applicability and abberviations in NR-U for 38.133 according to work split

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001394 Updates to clause 1-3 (General) for NR-U in 38.133**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6800 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR for applicability and abberviations in NR-U for 36.133 according to work split

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001564 Discussion on SI reading in NR-U**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.2 Cross Link Interference (CLI) handling and Remote Interference Management (RIM) for NR [NR\_CLI\_RIM]

#### 8.2.1 General [NR\_CLI\_RIM-Core]

#### 8.2.2 RRM core requirements maintenance (38.133) [NR\_CLI\_RIM-Core]

**R4-2000653 Discussion on scheduling restriction for CLI measurements**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000960 Discussion on scheduling restriction update**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001621 Discussion on accuracy requirements for CLI measurements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001622 [draft] reply LS on CLI measurement capability**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001623 CR on CLI measurement requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0545 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.2.3 RRM perf. requirements (38.133) [NR\_CLI\_RIM-Perf]

##### 8.2.3.1 CLI measurement accuracy [NR\_CLI\_RIM-Perf]

**R4-2000654 Measurement accuracy for CLI SRS-RSRP measurement**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000962 SRS-RSRP measurement accuracy**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001624 CR on CLI measurement accuracy requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0546 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.2.3.2 Test cases [NR\_CLI\_RIM-Perf]

**R4-2000961 Discussion on CLI performance test**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001625 Discussion on RRM test cases for CLI**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.2.3.3 Others [NR\_CLI\_RIM-Perf]

**R4-2000958 Discussion on minimum SRS RP level**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.3 NR mobility enhancement [NR\_Mob\_enh]

#### 8.3.1 General [NR\_Mob\_enh-Core]

**R4-2001782 Revised WID for LTE inter-band CA for 3 bands DL with 1 bands UL**

*Type: WID revised For: Agreement  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.3.2 RRM core requirements (38.133) [NR\_Mob\_enh-Core]

**R4-2001417 Testcases for LTE and NR mobility enhancements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Test cases for mobility enhancement

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.3.2.1 Handover with simultaneous Rx/Tx with source and target cells [NR\_Mob\_enh-Core]

**R4-2000375 Discussion on remaining issues on DAPS handover**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000376 CR for DAPS handover RRM requirement**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0435 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000723 Remaining issues on DAPS HO**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001413 Remaining open issues on DAPS handover for NR**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discuss remaining open issues for DAPS

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001414 TP:Updates to DAPS handover requirements for NR**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

TP on changes to conclude remaining open issues

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001571 Further discussion on remaining issues on DAPS handover**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001572 CR on DAPS handover requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0511 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001797 Discussion on dual active protocol stack handover**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.3.2.2 Conditional handover [NR\_Mob\_enh-Core]

**R4-2000377 Discussion on remaining issues on CHO**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000378 CR for CHO RRM requirement**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0436 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000724 Remaining issues on conditional HO**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001337 Conditional handover for NR**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001338 CR Introduction of handover delay requirements for conditional handover (section 6.1)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0485 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001415 Open issues for NR conditional handover**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

CR to conclude remaining open issues

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001416 TP:Update to conditional handover requirements for NR**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

TP on changes to conclude remaining open issues

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001573 Further discussion on remaining issues on conditional handover**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001798 Discussion on requirement of conditional handover**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.3.2.3 Conditional PSCell addition/change [NR\_Mob\_enh-Core]

**R4-2000379 Discussion on conditional PSCell addition/change**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000380 CR for Conditional PSCell addition/change RRM requirement**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0437 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000725 On conditional PSCell addition and change**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001574 Discussion on conditional PSCell addition/change requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.3.2.4 Others [NR\_Mob\_enh-Core]

### 8.4 5G V2X with NR sidelink [5G\_V2X\_NRSL]

#### 8.4.1 General [5G\_V2X\_NRSL]

**R4-2000703 Reply LS to RAN1 on simultaneous transmission of PSFCH**

*Type: LS out For: Approval  
 to -  
 Source: Futurewei*

**Abstract:**

Reply LS to RAN1 on simultaneous transmission of PSFCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000706 Reply LS to RAN2 on UL-SL Prioritization**

*Type: LS out For: Approval  
 to -  
 Source: Futurewei*

**Abstract:**

Reply LS to RAN2 on UL-SL Prioritization

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001214 TR update TR38.886 v0.5.0**

*Type: draft TR For: Approval  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001215 Summary on E-mail discussion for NR V2X**

*Type: other For: Approval  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001221 TP on conclusion of NR V2X WI**

*Type: pCR For: Approval  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.4.2 Co-existence Study [5G\_V2X\_NRSL-Core]

##### 8.4.2.1 Simulation Results [5G\_V2X\_NRSL-Core]

**R4-2000472 MPR, A-MPR results for PSSCH/PSCCH transmission**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000473 MPR, A-MPR results for simultaneous PSFCH transmission**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.2.2 In-device coexistence [5G\_V2X\_NRSL-Core]

**R4-2000701 TP on Indevice Coexistence**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

TP on indevice coexistence

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.2.3 UE-to-UE coexistence [5G\_V2X\_NRSL-Core]

#### 8.4.3 System parameters [5G\_V2X\_NRSL-Core]

**R4-2000471 Switching time between NR SL and LTE SL**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000567 Remaining issues on channel raster for band n47**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000568 CR on UE system parameters for NR V2X UE for TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0227 Cat: B (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000569 CR on system parameters for NR V2X for TS 38.104**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0128 Cat: B (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001003 TP on channel arrangement for NR V2X**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.3.1 Bands and bandwidth [5G\_V2X\_NRSL-Core]

**R4-2000570 Channel bandwidths for NR V2X licensed bands**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000571 TP on channel bandwidths for NR V2X licensed band n38**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000902 NR V2X licensed frequency bands for SL operation**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.3.2 Others [5G\_V2X\_NRSL-Core]

**R4-2002028 On channle raster for NR-V2X**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.4.4 UE RF requirements [5G\_V2X\_NRSL-Core]

**R4-2000688 Addition of TX diversity into V2X**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0235 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000690 Declare Supported Post Antenna Gain for UE**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0236 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002029 On remaining NR-V2X UE RF requirements**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002030 draftCR for TS 38.101-1 Con-current operation for NR-V2X**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002031 draftCR for TS 38.101-3 Con-current operation for NR-V2X**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.4.1 Transmitter characteristics [5G\_V2X\_NRSL-Core ]

**R4-2000702 NR V2X UE RF requirements considerations**

*Type: other For: Decision  
 Source: Futurewei*

**Abstract:**

Discussion document analyzing consideration RF requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000704 On Simultaneous Transmission of PSFCH**

*Type: other For: Discussion  
 Source: Futurewei*

**Abstract:**

On Simultaneous Transmission of PSFCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000705 On UL-SL Prioritization**

*Type: other For: Discussion  
 Source: Futurewei*

**Abstract:**

On UL-SL Prioritization

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001079 [V2X] TP on PSFCH MPR requirements for NR V2X in band n47**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001080 [V2X] MPR simulation results for PC3 NR V2X in band n47**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001081 [V2X] MPR simulation results for PC2 NR V2X in band n47**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001082 [V2X] TP to update MPR simulation assumption for NR V2X in band n47**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001083 [V2X] TP on MPR requirements for PC3 NR V2X in band n47**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001084 [V2X] TP on RF requirements for PC2 NR V2X UE in band n47**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001085 [V2X] TP on S-SSB MPR requirements for NR V2X in band n47**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001216 TP on additional On/OFF Switching Time Mask for TDM operation between LTE SL and NR SL at n47**

*Type: pCR For: Approval  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001217 Draft CR on NR V2X UE Transmitter requirements for single carrier**

*Type: draftCR For: Endorsement  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001218 TP on revised MPR simulation assumptions and update NR requirements to cover open issue**

*Type: pCR For: Approval  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001220 A-MPR simulation assumptions and initial results for NR V2X at n47**

*Type: pCR For: Approval  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001224 Draft CR on additional On/OFF Switching Time Mask for TDM operation between LTE SL and NR SL at n47**

*Type: draftCR For: Endorsement  
 38.886 v0.5.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001240 MPR simulation results for PSSCH/PSCCH NR V2X UE**

*Type: other For: Approval  
 Source: LG Electronics Finland*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001719 MPR simulations results for multi-UE PSFCH transmission**

*Type: other For: Approval  
 Source: LG Electronics Finland*

**Abstract:**

This contribution presents MPR simulation results for UE transmitter with 20MHz bandwidth with non-contiguous allocation of simultaneous PSFCH transmissions.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002032 draftCR for TS 38.101-1 PC2 RF requirements NR V2X**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002033 draftCR for TS 38.101-1 UL MIMO for NR-V2X**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.4.2 Receiver characteristics [5G\_V2X\_NRSL-Core ]

**R4-2000599 CR for TS38.101-1, Introduce Rx requirements for NR V2X**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0232 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000600 CR for TS38.101-3, Introduce Rx requirements for NR V2X concurrent operation**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0183 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000606 CR for TS38.104, Introduce frequency band and channel arrangement for NR V2X**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0129 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000607 Dicussion on remaining RF requirements for NR V2X**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000966 TP on REFSENS for NR V2X**

*Type: pCR For: Approval  
 38.886 v0.4.0  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.4.5 RRM core requirements (38.133) [5G\_V2X\_NRSL-Core]

**R4-2000939 Discussion of remaining issues for NR V2X**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Abstract:**

It discusses remaining issues for NR V2X RRM requirements based on the agreed WF in last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000943 CR of NR V2X RRM(introduction & reliability of GNSS signal)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0473 Cat: B (Rel-16)  
  
 Source: LG Electronics Inc.*

**Abstract:**

It is CR on introduction and reliability of GNSS signal for NR V2X RRM requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.5.1 Transmit timing requirements [5G\_V2X\_NRSL-Core]

**R4-2001575 CR on introducing UE sidelink timing requirements for NR V2X**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0512 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.5.2 Synchronization requirements [5G\_V2X\_NRSL-Core]

**R4-2000768 On NR V2X Synchronization Source Selection Requirement**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

Rx dropping rate requirement proposal

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000770 On NR V2X Initiation/cease SLSS Tx with gNB/eNB as synchronization source Requirement**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

NR V2X Initiation/cease SLSS Tx with gNB/eNB as synchronization source Requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001027 Discussion on NR V2X synchronization requirement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001032 CR on NR V2X initiation SLSS 38.133 -R16**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0476 Cat: B (Rel-16)  
  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001576 Discussion on synchronization remaining issues for NR V2X**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.5.3 Measurement requirements [5G\_V2X\_NRSL-Core]

**R4-2000771 On NR V2X Resource Selection requirement**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

Resource pre-emption and SL-RSRP measurement requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000940 Discussion of measurement accuracy for NR V2X**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Abstract:**

It discusses NR V2X measurement accuracy for PSBCH-RSRP, PSSCH-RSRP, PSCCH-RSRP and SL RSSI.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000941 Simulation assumption of PSSCH-RSRP and PSCCH-RSRP measurement**

*Type: other For: Approval  
 Source: LG Electronics Inc.*

**Abstract:**

It provides simulation assumption for PSSCH-RSRP and PSCCH-RSRP measurements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001028 Discussion on NR V2X measurement requirement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001031 Link-level simulation assumptions for NR SL L1-RSRP measurement**

*Type: other For: Approval  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001577 Discussion on measurement remaining issues for NR V2X**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.5.4 Interruption requirements [5G\_V2X\_NRSL-Core]

**R4-2000579 CR on interruption requirements for NR V2X**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0452 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001029 Discussion on NR V2X interruption requirement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.5.5 Unicast, groupcast related [5G\_V2X\_NRSL-Core]

**R4-2000769 On NR V2X Distance-Based HARQ For Groupcast**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

NR V2X Distance-Based HARQ For Groupcast requirement and test proposal

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001030 Discussion on NR V2X unicast-groupcast related requirement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.4.5.6 Others [5G\_V2X\_NRSL-Core]

**R4-2000942 Discussion of Annex.B for NR V2X side conditions**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Abstract:**

It discusses to introduce Annex.B for NR V2X RRM side condition.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.5 Integrated Access and Backhaul for NR [NR\_IAB]

**R4-2001852 TP to TS 38.174 v0.0.1: Applicability of RRM requirements for different IAB classes**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP provides rules for RRM requirements applicability for different IAB classes. It is based on agreement in RP-193199

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.1 General [NR\_IAB-Core/Perf]

**R4-2000824 FR1 IAB frequency band**

*Type: other For: Approval  
 Source: Huawei, HiSilicon, China Telecom, China Unicom, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001025 TP to TR 38.xxx: Addition of antenna model and parameters in subclause 6.2**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

At the end of this contribution an updated version the previously presented text proposal is submitted for approval.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001186 On multicarrier and CA for IAB**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Discussion and proposal on handling of multicarrier for IAB

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001868 IAB class definition**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper,IAB class definition is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001886 TP for TR \_IAB classification**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of IAB class defintion is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001887 TP for TR \_RF Requirements reference points**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of reference point is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001888 TP for TR \_Spec organization**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of spec organization is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001901 TP for TS \_Conducted and radiated requirement reference points**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on reference point is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001902 TP for TS \_Definitions**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on Definition is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001903 TP for TS \_IAB classes**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on IAB class is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002043 [IAB] Discussion on drafting TS and referencing**

*Type: other For: Discussion  
 Source: Huawei*

**Abstract:**

Discussion on use of referencing in IAB TS 38.174

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002123 WF on IAB TS spec structure and terminology**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.2 Co-existence study [NR\_IAB-Core]

**R4-2000972 simulation results for FR1 IAB coexistence study**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000973 simulation results for FR2 IAB coexistence study**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000977 In-band blocking for FR1 IAB MT**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000978 In-band blocking for FR2 IAB MT**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001432 TP to TR 38.xxx IAB-Node blocking, power class and coexistence requirements in FR2**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we provide further simulation results as agreed in RAN4#93 and discuss the receiver blocking of both legacy NR network and IAB-Nodes. Also coexistence requirements for IAB-Nodes are proposed.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001708 [IAB] TP to TR 38.xxx Antenna assumptions**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Text for the draft TR capturing the antenna definition and background for the co=-location simulations

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.3 System parameters [NR\_IAB-Core]

**R4-2000275 TP for TS38.174: IAB system parameters**

*Type: pCR For: Approval  
 38.174 v0.0.2  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000974 Discussion on IAB MT channel bandwidth**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002044 [IAB] TP to TS 38.174, clause 4**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Huawei*

**Abstract:**

TP filling in the general section in clause 4

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002045 [IAB] TP to TS 38.174, clause 5**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Huawei*

**Abstract:**

TP filling in the operating band and channel arrangements sections in clause 5

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.4 RF requirements [NR\_IAB-Core]

**R4-2000964 IAB DU RF Requirements**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

This paper discusses the IAB DU RF requirements definition and propose to import most of the requirements from the BS specifications

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000965 IAB MT RF Requirements**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000975 frequency error requirement for IAB**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000976 switching time for IAB DU and MT**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000979 Discussion on IAB MT OOBB**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000980 Discussion on IAB MT BC requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001019 Technical background for IAB-Node reference sensitivity**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution the technical background information relevant for IAB-Node reference sensitivity requirement have been collected.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001022 Technical background for IAB-Node out-of-band receiver blocking**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution the technical background information for IAB-Node out-of-band receiver blocking have been collected, based on current specifications.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.4.1 Conductive RF core requirements [NR\_IAB-Core]

###### 8.5.4.1.1 Transmitter characteristics [NR\_IAB-Core]

**R4-2000618 IAB frequency error requirement**

*Type: other For: Approval  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000619 Discussion of IAB MT power control accuracy requirement**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000900 Discussion on IAB Conducted Requirements**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.5.4.1.2 Receiver characteristics [NR\_IAB-Core]

##### 8.5.4.2 Radiated RF core requirements [NR\_IAB-Core]

###### 8.5.4.2.1 Transmitter characteristics [NR\_IAB-Core]

**R4-2000276 Radiated transmit power and OTA output power for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000277 OTA output power dynamic for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000278 OTA transmit signal quality for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000279 OTA Unwanted emission for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000901 Discussion on IAB Radiated Tx Requirements**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001187 On IAB MT beam correspondence**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Discussion and proposal for beam correspondence for MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001280 Definition of IAB-MT ACLR requirement in FR2**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

In this paper we analyze IAB/NR adjacent channel co-existence and make a proposal for FR2 ACLR requirement for IAB-MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001281 Beam correspondence requirement for IAB-MT**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

This paper discusses our views on definition of beam correspondence requirement for IAB-MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001283 On IAB-MT classes and dynamic range**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

This paper presents our views on IAB-MT classes definition and dynamic range

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001431 TP to TR 38.xxx IAB-Node Frequency error requirements in FR2**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we provide further motivation to specify frequency error as relative requirement for IAB-MT and propose requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001433 Switching time requirements between IAB-MT and IAB-DU**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss the switching time between IAB-DU and IAB-MT.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001434 Beam correspondence requirement for IAB-Nodes**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we provide our views on how beam correspondence capability for an IAB-Node could be handled from requirement point of view.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001436 IAB-Node transmitter requirements for FR2**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss the transmitter requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001706 [IAB] Discussion on beam correspondence**

*Type: other For: Discussion  
 Source: Huawei*

**Abstract:**

Discussion on beam correspondence for IAB-MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001707 [IAB] Discussion on transmitter OFF power**

*Type: other For: Discussion  
 Source: Huawei*

**Abstract:**

Discussion on the TX OFF levels for IAB nodes with proposal on requirement.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001709 [IAB] Discussion on power classes**

*Type: other For: Discussion  
 Source: Huawei*

**Abstract:**

Discussion on how to implement power classes for IAB-MT node.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001865 IAB MT ACLR**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, IAB MT ACLR requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001866 IAB MT TX dynamic range and min Tx power**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TX dyanmica range requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001867 IAB MT TX power**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TX power requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001869 IAB MT carrier leakage and IQ impag**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, IBE requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001870 IAB MT DU switching latency**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, DU and MT switch delay is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001871 IAB MT Frequency error**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, MT frequency error requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001872 IAB MT power control requirement**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, MT power control requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001874 TP for TR \_9 IAB OTA Beam correspondence**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of beam correspondence is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001875 TP for TR \_9 IAB OTA IAB MT carrier leakage**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of carrier leakage is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001876 TP for TR \_9 IAB OTA IAB MT frequency error**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of frequency error is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001877 TP for TR \_9 IAB OTA IAB MT In-band emission**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of inband emissin is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001878 TP for TR \_9 IAB OTA output power dynamics**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of output power dynamic is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001879 TP for TR \_9 IAB OTA output power**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of OTA output power is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001880 TP for TR \_9 IAB OTA transmit ON\_OFF power**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of transmit ON\_OFF power is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001881 TP for TR \_9 IAB OTA transmitter intermodulation**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of transmitter intermodulation is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001882 TP for TR OTA unwanted emissions**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of unwanted emission is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001883 TP for TR \_9 radiated power**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of radiated power is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001889 TP for TS \_9 IAB output power**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of IAB output power is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001890 TP for TS \_9 OTA Carrier leakage**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of OTA carrier leakage is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001891 TP for TS \_9 OTA EVM equalizer spectrum flatness**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of equalizer flatness is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001892 TP for TS \_9 OTA EVM**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of EVM is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001893 TP for TS \_9 OTA In-band emissions**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of in-band emission is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001894 TP for TS \_9 OTA output power dynamics**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of output power dynamics is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001895 TP for TS \_9 OTA TX OFF Power**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of TX OFF power is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001896 TP for TS \_9 OTA TX ON\_OFF time mask**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of TX ON\_OFF time mask is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001897 TP for TS \_9 OTA unwanted emissions -ACLR \_OBW**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of ACLR is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001898 TP for TS \_9 Radiated transmit power**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on of raditated transmit power is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001904 TP for TS \_Relationship with other core specifications**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on relation to other spec is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.5.4.2.2 Receiver characteristics [NR\_IAB-Core]

**R4-2000280 OTA REFSENS for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000281 Receiver dynamic range for FR2 IAB**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000282 OTA in-band selectivity for IAB-MT**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000283 OTA spurious emission for IAB**

*Type: pCR For: Approval  
 38.174 v0.0.2  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000284 OTA in-channel selectivity for IAB**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001020 TP to TR 38.xxx: Addition of background information for FR2 reference sensitivity in subclause 10.3**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution a text proposal with technical background information relevant for the IAB-Node FR2 reference sensitivity requirement have been created. The text proposal is attached at the end of this contribution and is presented for approval to be

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001021 TP to TS 38.174: Addition of FR2 IAB reference sensitivity requirement text in clause 3 and clause 10**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

In this contribution specification text for IAB Node reference sensitivity have been created. The intension is to capture specification text, including the structure, technical details and requirement levels for FR2 IAB-Node.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001023 TP to TR 38.xxx: Addition of background information for FR2 out-of-band blocking in subclause 10.6**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

At the end of the contribution a text proposal is attached for approval. The text proposal brings technical background information relevant for IAB-Node out-of-band blocking requirement to be included in the technical report.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001024 TP to TS 38.174: Addition of FR2 IAB out-of-band receiver blocking requirement in subclause 10.6**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

In this contribution specification text for IAB Node FR2 out-of-band blocking requirement have been created in a text proposal. The text proposal for the technical specification is attached at the end of this contribution and it is presented for approval.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001282 Definition of IAB-MT in-band blocking requirement**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

This paper presents system level simulation results for definition of IAB-MT in-band blocking requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001435 IAB-Node receiver requirements for FR2**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss the receiver requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001873 IAB MT inband blocking and ACS**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, MT inband blocking and ACS requirement is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001884 TP for TR \_10 IAB OTA ACS**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of OTA ACS is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001885 TP for TR \_10 IAB OTA in-band blocking**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, TP of OTA in-band blocking is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001899 TP for TS \_10 OTA ACS**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on ACS is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001900 TP for TS \_10 OTA Inband blocking**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

in this paper, TP of TS on inband blocking is proposed

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.5 RRM core requirements (38.133) [NR\_IAB-Core]

**R4-2000051 Definition of macro and micro IAB nodes from RRM perspective**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001339 RRM requirements for IAB**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.5.1 RRC connection mobility control [NR\_IAB-Core]

**R4-2001549 Discussion on RRC connection mobility control for IAB**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001853 TP to TS 38.174 v0.0.1: RRC re-establishment requirements for IAB MT**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines RRC re-establishment requirements for IAB MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001854 TP to TS 38.174 v0.0.1: RRC re-direction requirements for IAB MT**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines RRC re-direction requirements for IAB MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001855 TP to TS 38.174 v0.0.1: PRACH requirements for IAB MT**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines PRACH requirements for IAB MT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002128 RRC Connection Mobility Control in IAB Networks**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.5.2 MT timing related requirements [NR\_IAB-Core]

**R4-2000052 MT timing requirements for IAB**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001856 TP to TS 38.174 v0.0.1: IAB MT transmit timing requirements**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines transmit transmit timing requirements for IAB MT including initial transmit timing accuracy

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001857 TP to TS 38.174 v0.0.1: IAB MT TA accuracy requirements**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines timing advance requirements for IAB MT including TA adjustment accuracy

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001954 Discussion on MT timing for IAB**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001955 TP to TS 38.174 MT Timing**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002126 IAB-MT timing related requirements**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.5.3 DU timing related requirements [NR\_IAB-Core]

**R4-2001858 TP to TS 38.174 v0.0.1: Cell phase sync requirements for IAB DU**

*Type: pCR For: Approval  
 38.174 v0.0.1  
 Source: Ericsson*

**Abstract:**

This TP defines cell phase sync requirements for IAB DU

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002125 IAB-DU timing related requirements**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.5.4 RLM requirements [NR\_IAB-Core]

**R4-2000053 RLM requirements for IAB MT**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000652 Discussion on RLM requirement for IAB-MT**

*Type: other For: Discussion  
 Source: Samsung Electronics Co., Ltd*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000889 Discussion on RLM requirement for IAB-MT**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002127 IAB-MT RLM requirements**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.5.5 BFD/BFR requirements [NR\_IAB-Core]

**R4-2000890 Discussion on BFD and CBD requirement for IAB-MT**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002124 IAB-MT BFD/BFR requirements**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.5.5.6 Other requirements [NR\_IAB-Core]

#### 8.5.6 EMC core requirements [NR\_IAB-Core]

**R4-2001253 further discussion on IAB EMC emission requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Abstract:**

The emission requirement of an IAB has been discussed in this papper.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001254 further discussion on IAB EMC immunity requirement**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Abstract:**

The immunity requirement of an IAB has been discussed in this papper

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001255 TP to TR IAB EMC emission requirements**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Abstract:**

The TP to TR of IAB EMC emission requirements discussion has been provided.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001256 TP to TR IAB EMC General part**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Abstract:**

The TP to TR of IAB EMC general discussion has been provided. It is proposed to approve the following text proposal.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001257 TP to TR IAB EMC immunity requirements**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Abstract:**

The TP to TR of IAB EMC immunity requirements discussion has been provided. It is proposed to approve the following text proposal.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.5.7 Others [NR\_IAB-Core]

### 8.6 Multi-RAT Dual-Connectivity and Carrier Aggregation enhancements [LTE\_NR\_DC\_CA\_enh]

#### 8.6.1 General [LTE\_NR\_DC\_CA\_enh-Core]

#### 8.6.2 RF requirements [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.2.1 RF requirements for EN-DC [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.2.2 RF requirements for CA [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.2.3 RF requirements for NR-DC [LTE\_NR\_DC\_CA\_enh-Core]

#### 8.6.3 RRM core requirements (38.133) [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.3.1 Asynchronous and synchronous NR-NR Dual Connectivity [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2001626 CR on Interruptions at SCell activation/deactivation in async NR-DC**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0547 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.6.3.2 Early Measurement reporting [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2000988 On MR-DC Early Measurement reporting**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002056 Further discussion on early measurement reporting in MR-DC**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.6.3.2.1 NR measurements for EMR [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2001340 Early measurements and reporting in NR**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper we discuss NR measurements for EMR while serving cell is in NR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001627 Discussion on early measurement in NR**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001795 Discussion on LTE CRS based and NR SSB based measurement in NR IDLE/INACTIVE mode**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001927 Further details on early measurement reporting requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Further details on early measurement reporting requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001928 Early measurement reporting requirements structure**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0565 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Early measurement reporting requirements structure

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.6.3.2.2 LTE NR Inter-RAT EMR [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2001341 NR Inter-RAT measurements for early measurement reporting**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001628 Discussion on LTE – NR inter-RAT EMR**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001796 Discussion on NR SSB based measurement in LTE IDLE/INACTIVE mode**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.6.3.3 Efficient and low latency serving cell configuration, activation and setup [LTE\_NR\_DC\_CA\_enh-Core]

###### 8.6.3.3.1 Direct SCell activation [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2000059 On delay requirements for direct SCell activation in resume**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000060 [CR] Add delay requirements for direct SCell activation in resume**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0413 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000061 [CR] Add delay requirements for direct SCell activation in resume**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0414 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000062 [CR] Delay requirements for direct SCell activation**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0415 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001011 Direct SCell activation interruption requirements**

*Type: other For: Approval  
 Source: NEC*

**Abstract:**

Provided possible modification for delay requirements of direct SCell activation upon addition and handover and also provided our views on direct SCell activation interruption requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001629 Discussion on remaining issues for direct SCell activation**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001630 CR on direct SCell activation delay**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0548 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002084 On direct SCell activation**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution providing background to proposals on correction of activation time line and definition of interruption window.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002085 CR 38.133 (8.3.4-5) Corrections to Direct SCell activation**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0581 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Corrections to activation timeline with respect to usage of TFirstSSB. Addition of interruption windows.

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.6.3.3.2 SCell dormancy [LTE\_NR\_DC\_CA\_enh-Core]

**R4-2001342 UE Requirements for Dormancy Scell**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper we take an initial look at the agreements and which UE requirements RAN4 would need to define

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001631 Discussion on RRM requirements for SCell dormancy**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002059 Discussion on Scell BWP dormancy**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.6.3.4 Interruption under EN-DC and NE-DC [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.3.5 Fast recovery [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.3.6 Cross-carrier scheduling with different numerologies on the scheduling and scheduled carriers [LTE\_NR\_DC\_CA\_enh-Core]

##### 8.6.3.7 Others [LTE\_NR\_DC\_CA\_enh-Core]

### 8.7 UE power saving in NR [NR\_UE\_pow\_sav]

#### 8.7.1 General [NR\_UE\_pow\_sav]

#### 8.7.2 Switching and interruption time [NR\_UE\_pow\_sav]

**R4-2000601 Further discussion on switching and interruption for maximum MIMO layer adaptation**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000767 Switching time for MIMO only change**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

Propose switching delay for MIMO layer only BWP change

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000969 Discussion on switching time for MIMO layer adaptation**

*Type: other For: Decision  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001758 On switching time for MIMO layer/antenna number adaption**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001793 Discussion on UE dynamic adaptation to the maximum number of MIMO layers**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.7.3 RRM core requirements (38.133) [NR\_UE\_pow\_sav-Core]

##### 8.7.3.1 RRM measurement relaxation [NR\_UE\_pow\_sav-Core]

**R4-2000152 Remaining issues on NR UE power saving**

*Type: other For: Approval  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000157 Draft LS on introducing thresholds for inter-frequency RRM relaxation for UE Power Saving**

*Type: LS out For: Approval  
 to RAN2  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000158 Evaluation of RRM relaxation for power saving**

*Type: other For: Discussion  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000575 Further discussion on RRM measurement relaxation for NR power saving**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000576 CR on measurement relaxation in IDLE mode for UE power saving**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0449 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000577 CR for DCI based TCI state switch delay due to cross slot scheduling**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0450 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000578 CR for DCI based BWP switch delay due to cross slot scheduling**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0451 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000642 RRM measurement relaxation for UE power saving**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000963 Measurement relaxation for power saving**

*Type: other For: Discussion  
 Source: LG Electronics Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000989 On RRM measurement relaxation for power saving**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001343 UE RRM Core requirements when applying UE power saving**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

we discuss how the RRM measurement relaxation can be facilitated for RRC\_IDLE/INACTIVE UEs and the related UE requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001344 LS on introduction of carrier specific thresholds for UE Power Saving schemes**

*Type: LS out For: Approval  
 to RAN2  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001654 Discussion on measurement relaxation in power saving**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001754 Discussions on RRM impact of NR UE power saving**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we continue the discussions on RRM measurement relaxations based on latest agreements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001794 Discussion on RRM measurement relaxation in IDLE/INACTIVE mode**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002137 RRM measurement relaxation for power saving**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.7.3.2 Requirements for MIMO layer adaptation [NR\_UE\_pow\_sav-Core]

**R4-2000153 Regarding switching and interruption timing requirement for MIMO layer adaption**

*Type: other For: Approval  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000602 CR on RRM requirement for maximum MIMO layer adaptation**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0455 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000787 On baseband requirement with MIMO layer adaptation**

*Type: other For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000990 On requirements for MIMO layer adaptation for power saving**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001655 Discussion on RRM requirement for MIMO layer adaption case2**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002136 Interruption time during MIMO layer adaptation**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.8 NR Positioning Support [NR\_pos]

#### 8.8.1 General (Work plan, rapporteur input) [NR\_pos-Core/Perf]

**R4-2001947 LS on UE measurement report mapping for UE positioning measurements in NR**

*Type: LS out For: Approval  
 to RAN2  
 Source: Ericsson*

**Abstract:**

LS on UE measurement report mapping for UE positioning measurements in NR

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.8.2 RRM core requirements (38.133) [NR\_pos-Core]

**R4-2001632 On report mapping for UE/gNB positioning measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001633 [draft] reply LS on agreements related to NR Positioning**

*Type: LS out For: Approval  
 to RAN1, RAN2, RAN3  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.8.2.1 UE requirements [NR\_pos-Core]

**R4-2000388 Discussion on UE PRS processing behavior**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001918 UE behaviour for processing DL PRS without measurement gap**

*Type: other For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Disussion on one of the open issues raised in RAN1 LS.

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.8.2.1.1 System-level evaluations for PRS-RSTD and PRS-RSRP [NR\_pos-Core]

###### 8.8.2.1.2 PRS-RSTD measurements [NR\_pos-Core]

**R4-2000389 Further Discussion on NR PRS RSTD Requirements for UE**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000589 Discussion on RSTD measurement requirements**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000731 On PRS-RSTD measurements for NR positioning**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000783 On RSTD measurement report mapping for NR positioning**

*Type: other For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000784 LS on RSTD measurement report mapping for NR positioning**

*Type: LS out For: Approval  
 to RAN1, RAN2  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000998 Discussion on PRS-RSTD measurement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001637 Discussion on RSTD measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001941 On PRS RSTD measurements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS RSTD measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001942 On PRS RSTD measurement report mapping**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS RSTD measurement report mapping

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001943 Measurement report mapping for PRS RSTD**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0567 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Measurement report mapping for PRS RSTD

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.8.2.1.3 PRS-RSRP measurements [NR\_pos-Core]

**R4-2000590 Discussion on PRS-RSRP measurement requirements**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000732 On PRS-RSRP measurements for NR positioning**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000999 Discussion on PRS-RSRP measurement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001638 Discussion on PRS-RSRP measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001944 On PRS-RSRP measurements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS-RSRP measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001945 On PRS-RSRP measurement report mapping**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On PRS-RSRP measurement report mapping

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001946 Measurement report mapping for PRS-RSRP**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0568 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Measurement report mapping for PRS-RSRP

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.8.2.1.4 Rx-Tx time difference measurements [NR\_pos-Core]

**R4-2000603 Discussion on Rx-Tx timing difference measurement**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000604 Discussion on definition of Rx-Tx timing difference measurement**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000733 On UE Rx-Tx time difference measurement for NR positioning**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001000 Discussion on UE Rx-Tx time difference measurements**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001639 Discussion on Rx-Tx time difference measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001859 UE Rx-Tx Measurement Report Mapping in NR**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This paper provides UE Rx-Tx measurement report mappings in NR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001940 On UE Rx-Tx measurements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

On UE Rx-Tx measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.8.2.1.5 SSB and CSI-RS RSRP/RSRQ measurements [NR\_pos-Core]

**R4-2000734 On positioning requirements for E-CID**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001948 NR E-CID measurement requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0569 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

NR E-CID measurement requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001949 NR E-CID reporting criteria requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0570 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

NR E-CID reporting criteria requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001950 LS on NR E-CID measurements**

*Type: LS out For: Approval  
 to RAN2  
 Source: Ericsson*

**Abstract:**

LS on NR E-CID measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.8.2.1.6 Link-level evaluations for PRS-RSTD and PRS-RSRP [NR\_pos-Core]

**R4-2000391 Link-level simulation results for RSTD measurement**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000591 Link-level simulation results of PRS RSRP**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000592 Link-level simulation results of PRS RSTD**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000735 Link-level PRS-RSTD simulation results**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001001 Link level evaluation on PRS-RSRP and PRS-RSTD**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001635 Link level simulation results for PRS measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001636 Updated link level simulation assumption for RSTD and RSRP**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001939 Link simulation results for NR RSTD**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Link simulation results for NR RSTD

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.8.2.2 gNB requirements [NR\_pos-Core]

**R4-2000054 Discussion on gNB requirements and report mapping**

*Type: other For: Discussion  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000390 Considerations on gNB measurement requirements for NR positioning**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000736 on gNB requirements for NR positioning**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001196 Views on gNB measurement for NR positioning**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001496 On gNB measurement requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This paper analyzes the possible opportunities and take a look on the need of additional requirements in the gNB.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001634 Discussion on gNB requirements for NR positioning**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon, CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001919 On gNB measurement requirements for NR positioning**

*Type: other For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on gNB measurement requirements for NR positioning.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.8.2.3 Impact on existing RRM requirements [NR\_pos-Core]

**R4-2000605 Further discussion on impact of positioning measurement on RRM requirements**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000737 On Impact of NR positioning on existing RRM requirements**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001640 Impact of PRS measurement on existing RRM requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.8.2.4 Others [NR\_pos-Core]

**R4-2000593 Discussion on frequency layer and measurement gap**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000738 On UE-based positioning requirements**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.9 Physical layer enhancements for NR URLLC [NR\_L1enh\_URLLC-Core]

#### 8.9.1 Demodulation and CSI requirements [NR\_L1enh\_URLLC-Perf]

##### 8.9.1.1 Test feasibility [NR\_L1enh\_URLLC-Perf]

**R4-2000370 Discussion on test feasibility and methodology for URLLC**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000566 Simulation results for URLCC device test times**

*Type: other For: Discussion  
 Source: Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001178 URLLC error floor test**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Discussion on reaching confidence level and proposals for test parameters and SNR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001483 Discussion and simulation results for URLLC high reliability test feasibility**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discuss and simulation method 1 and method 2, share our view on URLLC high reliability test feasibility

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001695 On NR Rel-16 high reliability BS demodulation test feasibility and methodology**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we analyse the proposed two methods in terms of test feasibility and meaningfulness and propose which method is suitable under expected practical test circumstances. We also contribute simulation results for both methods.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002115 Views on URLLC Test Feasibility**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.9.1.2 UE demodulation and CSI requirements (38.101-4) [NR\_L1enh\_URLLC-Perf]

**R4-2000371 Discussion on test cases for URLLC**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000944 Discussion on UE performance requirements for URLLC**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001484 Discussion and simulation results for URLLC UE PDSCH demodulation requirements for high reliability**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion and give simulation assumption for the PDSCH high reliability demodulation requiremnets

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001485 Discussion on URLLC UE performance requriements for low latency**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion UE capability 2, mapping Type B and pre-emption for URLLC UE low latency performance requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001486 Discussion on URLLC UE CQI reporting requrements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our views on CQI reporting test for URLLC

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001738 Vies on UE demodulation test for slot aggregation**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide our views on UE slot aggregation for URLLC

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001739 Aspects of Rel-15 UE candidate features**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide an overview of candidate UE features for URLLC

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002142 Views on URLLC Test Cases**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.9.1.3 BS demodulation requirements (38.104) [NR\_L1enh\_URLLC-Perf]

**R4-2000313 View on BS demodulation requirement for URLLC in NR Rel-16**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001179 Proposals for BS slot aggregation requirement**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposed parameters for a slot aggregation requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001180 Proposals for BS non-slot requirement**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposed parameters for non slot requirement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001181 Proposal for BS grant free transmission requirement**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposal for no requirement for grant free

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001182 Proposal for BS PUCCH requirement**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposal for no requirement for PUCCH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001197 Views on NR BS performance for URLLC**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001487 Discussion and simulation results for URLLC BS PUSCH demodulation requirements for high reliability**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion and give simulation assumption for the PUSCH demodulation requiremnets for URLLC high reliabiltiy

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001488 Discussion on URLLC BS performance requirements for low latency**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give simulation assumption for PUSCH low latency demodulation requirements to verify mapping Type B and discuss UL transmission with grant free

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001489 Discussion on introduction of PUCCH demodulation performance requirements for URLLC**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discussion PUCCH demodulation performance requirements for URLLC high reliability

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001696 On NR Rel-16 high reliability BS demodulation requirements**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss and propose our preferred way forward for high reliability requirements based on the test feasibility and meaningfulness analysis in our companion paper. Furthermore, we briefly discuss our opinions on low latency requireme

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.10 Single radio voice call continuity from 5G to 3G (SRVCC) [SRVCC\_NR\_to\_UMTS-Core]

#### 8.10.1 RRM core requirements maintenance (38.133) [SRVCC\_NR\_to\_UMTS-Core]

**R4-2001673 Correction on handover requirements for SRVCC**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0551 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.10.2 RRM perf requirements (38.133) [SRVCC\_NR\_to\_UMTS-Perf]

**R4-2001418 Test aspects of sRVCC for NR**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discuss the necessary tests for sRVCC to WCDMA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001672 Test case list for SRVCC**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.11 Enhancements on MIMO for NR [NR\_eMIMO]

#### 8.11.1 UE RF core requirements (38.101) [NR\_eMIMO-Core]

##### 8.11.1.1 DMRS enhancement with PI/2 BPSK [NR\_eMIMO-Core]

**R4-2000470 Pi/2 BPSK DMRS investigation**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000517 PI/2 BPSK MPR simulations with new REL16 DMRS**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002035 On eMIMO full power transmission**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.11.1.2 Uplink Tx Full Power transmission [NR\_eMIMO-Core]

**R4-2000315 Further discussion on Uplink full power transmission**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000469 TX full power capability**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000751 Discussion on UE RF requirments for eMIMO UL Full power Tx**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001230 About full power transmission tests in eMIMO**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001322 Verification of FP transmission and power-class indication for full power with two layers**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose an updated test scope for the FP modes and that an additional power-class capability is introduced for UEs supporting a higher power class only for two-layer transmission

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002036 On Pi\_2 BPSK DMRS**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.11.2 RRM core requirements (38.133) [NR\_eMIMO-Core]

##### 8.11.2.1 L1-SINR [NR\_eMIMO-Core]

**R4-2000285 On the Remaining Issues for L1-SINR Measurement Requirement**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000286 Simulation Results for L1-SINR Measurement Accuracy**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000287 Simulation Results Summary for L1-SINR Measurement Accuracy**

*Type: other For: Information  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000288 CR to TS38.133 on L1-SINR Measurement Requirement (Section 3.3 and 9)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0430 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000384 Discussion about L1-SINR measurement requirements**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000635 Simulation results on L1-SINR**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000935 Discussion on RRM requirements for L1-SINR**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000936 Discussion on L1-SINR delay requirement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000937 Discussion on L1-SINR accuracy requirement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000997 CR on SS-SINR and CSI-SINR measurement report mapping (section 10.1.16.1)**

*Type: draftCR For: Endorsement  
 38.133 v16.2.0  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001362 L1-SINR measurement period**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the L1-SINR measurements period.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001578 Discussion on L1-SINR measurement requirements for NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001579 Discussion on measurement restrictions for L1-SINR measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002120 RRM requirements for L1-SINR estimation**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.11.2.2 SCell Beam failure recovery [NR\_eMIMO-Core]

**R4-2000289 On the Remaining Issues for SCell Beam Failure Recovery RRM Requirement**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000290 CR to TS38.133 on SCell BFD and CBD (Section 8.5)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0431 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000291 CR to TS38.133 on SCell BFRQ Procedure (Section 8.5)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0432 Cat: B (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000938 Discussion on RRM requirements for BFR on Scell**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001580 discussion on SCell BFR requiremetns for NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002121 RRM requirements for SCell BFD, CBD and BFR**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.11.2.3 DL/UL beam indication with reduced latency and overhead [NR\_eMIMO-Core]

**R4-2000292 On the Remaining Issues for Enhancement on UL/DL Transmit Beam Selection with Reduced Latency and Overhead**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002122 DL/UL beam indication with reduced latency and overhead**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.11.2.4 Others [NR\_eMIMO-Core]

#### 8.11.3 Demodulation and CSI requirements [NR\_eMIMO-Perf]

##### 8.11.3.1 General [NR\_eMIMO-Perf]

**R4-2000319 Overview on Rel-16 eMIMO performance requirements**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000352 Views on test cases for eMIMO**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001740 Discussion on demodulation requirements for Rel-16 NR eMIMO**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.11.3.2 Demodulation requirements [NR\_eMIMO-Perf]

**R4-2000322 Test case design for DL multi-pannel/TRP transmission**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000324 Simulation assumption for eMIMO PDSCH test cases with multi-pannel/TRP transmission**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2001363 UE demodulation requirements for eMIMO**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation impacts due to Rel-16 NR eMIMO WI.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001466 Discussion on UE performance requirements for Multi-TRP in NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our views on whether to define performance requirements for Multi-TRP

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001467 Discussion on other UE performance requirements for NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our views on whether to define performance requirements for some of the UE enhancement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001469 Discussion on BS performance requirements for Multi-TRP in NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our views on whether to define performance requirements for Multi-TRP

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001470 Discussion on other BS performance requirements for NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our views on whether to define performance requirements for some of the BS enhancement

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.11.3.3 CSI requirements [NR\_eMIMO-Perf]

**R4-2000320 Test case design for Enhanced Type II codebook**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000321 Initial simulation results for PMI reporting with enhanced type II codebook**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000323 Simulation assumption for eMIMO PMI test cases with advanced Type II codebook**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2001468 Discussion on CSI enhancement demodulation performance requirement for NR eMIMO**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our views on whether to define performance requirements for CSI enhancement

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001735 Discussion on CSI requirements under interference**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper we discuss demodulation requirements under interfernce scenario

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.12 Add support of NR DL 256QAM for FR2 [NR\_DL256QAM\_FR2]

#### 8.12.1 General (Ad-hoc MoM/TR maintenance) [NR\_DL256QAM\_FR2]

**R4-2000909 Draft TR 38.883 for FR2 DL 256QAM v1.1.0**

*Type: draft TR For: Approval  
 38.883 v1.1.0  
 Source: China Telecom*

**Abstract:**

Update TR to implement TPs approved in last meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.12.2 BS RF core requirements (38.104) [NR\_DL256QAM\_FR2]

**R4-2000910 TP for TR 38.883 BS RF requirements for FR2 DL 256QAM**

*Type: pCR For: Approval  
 38.883 v1.1.0  
 Source: China Telecom*

**Abstract:**

This TP is intended to capture the BS core requirement for FR2 DL 256QAM

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001189 NR BS TX EVM for FR2 DL 256QAM**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001426 CR to TS 38.104 Introduction of FR2 DL 256QAM**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0155 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, China Telecom, Verizon, NTT Docomo, T-Mobile*

**Abstract:**

FR2 DL 256QAM requirements are introduced to the technical specification

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001427 CR to TS 38.141-2: Introduction of FR2 DL 256QAM**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0125 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, China Telecom, Verizon, NTT Docomo, T-Mobile*

**Abstract:**

FR2 DL 256QAM requirements are introduced to the conformance specification

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001729 CR to TS 38.104: Addition of EVM for 256 QAM**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0160 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Add minimum EVM requirement for BS type 2-O carrier

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002103 CR to TS 38.141-2: Addition of EVM for 256 QAM**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0142 Cat: B (Rel-16)  
  
 Source: Ericsson Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.12.3 UE RF core requirements (38.101-2) [NR\_DL256QAM\_FR2]

**R4-2000823 UE maximum input level for DL 256QAM**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000911 TP for TR 38.883 UE RF requirements for FR2 DL 256QAM**

*Type: pCR For: Approval  
 38.883 v1.1.0  
 Source: China Telecom*

**Abstract:**

This TP is intended to capture the UE core requirement for FR2 DL 256QAM

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000954 Discussion on FR2 Maximum Input Level requirements for 256QAM**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001190 NR UE maximum input level for FR2 DL 256QAM**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001425 CR to TS 38.101-2: Introduction of FR2 DL 256QAM**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0123 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, China Telecom, Verizon, NTT Docomo, T-Mobile*

**Abstract:**

Introduction of UE requirements related to the feature of 256QAM DL transmission in FR2, i.e. maximum input power requirement and RMC for 256QAM.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.13 RF requirements for NR frequency range 1 (FR1) [NR\_RF\_FR1]

#### 8.13.1 RF core requirements [NR\_RF\_FR1]

**R4-2000069 Time masks for ULSUP in R16**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000070 CR to 38.101-3 on time masks for ULSUP in R16**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0158 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000754 CR for TS 38.101-1: Corrections for n48 receiver requirements**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0239 Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001323 UE behavior and time masks for ULSUP-TDM**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we discuss the UE behaviour and time masks when the UL timing difference between CGs is non-zero for ULSUP-TDM

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.1 Almost contiguous allocations for CP-OFDM UL for FR1 [NR\_RF\_FR1]

**R4-2001762 CR for 38.101-1 almost contiguous resource allocation**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0263 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.2 Intra-band contiguous DL CA for FR1 [NR\_RF\_FR1]

**R4-2000234 CR for 38.101-1 to introduce BCS1 for CA\_n77C and CA\_n78C**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0201 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon, CKH IOD UK*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001077 CR for 38.101-1 to correct bandwidth class B**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0248 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001385 Problems with CA channel arrangement**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001771 CR for intra-band CA configuration and DL requirement**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0266 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.3 Intra-band non-contiguous DL CA for FR1 for generic and n77 and n78 [NR\_RF\_FR1]

**R4-2001074 CR for 38.101-1: simply intra-band CA operating band table in clause 5.2A.1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0246 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.4 Intra-band contiguous UL CA for FR1 power class 3 [NR\_RF\_FR1]

**R4-2000093 Intra-band Contiguous ULCA MPR**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000711 [NRULCA] Definition of Intra-band Contiguous UL CA Allocation Types**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we provide generic definition of all the different allocation types for the NR contiguous UL CA MPR definition

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000712 [NRULCA] Definition of Intra-band Contiguous UL CA Bandwidths**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

in this contribution we provide a comprehensive definition of the different bandwidth and frequencies associated with intra-band contiguous UL CA, especially addressing CA bandwidth, ACLR measurement bandwidth and SEM mask

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000713 [NRULCA] PC3 Back-off Measurements for NR intra-band contiguous UL CA**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we provide a large set of measurement results and propose associated MPR tables and also provide input to NS04 and NS27 A-MPR

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001129 [NRULCA] Bandwidth Limitation in FR1 UL CA**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In NR single carrier operation the maximum channel bandwidth is 100 MHz and in UL and MPR is only defined for relative transmit bandwidths less than 4% for TDD and 3% for FDD. In this contribution we discuss the relevance of these limitations for UL CA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001756 on FR1 UL CA MPR requirement Rel-16**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001759 CR on FR1 UL CA MPR requirement Rel-16**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0262 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001772 CR for intra-band UL CA emission requirement**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0267 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001773 CR for intra-band UL CA output power**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0268 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001774 CR for intra-band UL CA signal quality**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0269 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.5 Intra-band non-contiguous UL CA for FR1 power class [NR\_RF\_FR1]

**R4-2000104 Intra-band non-contiguous ULCA requirements and MPR connsideration**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.6 Switching period between case 1 and case 2 [NR\_RF\_FR1]

**R4-2000064 Discussion on the switching between 1Tx carrier and 2Tx carrier**

*Type: other For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000066 CR to 38.101-1 on UE requirements for switching between 1Tx carrier and 2Tx carrier**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0184 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000067 CR to 38.101-3 on UE requirements for switching between 1Tx carrier and 2Tx carrier**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0157 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000113 Switching time details**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Why outage allowance should be 210 usec for a tuning time of 140 usec. Discussion on "single TAG"

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000125 Discussion on potential gain of large switching periods**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000131 RF time mask requirements to allow Tx switching between two uplink carriers**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000132 CR to TS 38.101-1: Switching time mask between two uplink carriers in UL CA and SUL**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0190 Cat: B (Rel-16)  
  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000133 CR to TS 38.101-3: Switching time mask between two uplink carriers in EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0160 Cat: B (Rel-16)  
  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000134 LS on UE capability for switching between two uplink carriers**

*Type: LS out For: Approval  
 to RAN2  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000628 discussion on open issue for Tx switching between 2 uplink carriers**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000643 Requirements for switching between case1 and case2**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000810 Further consideration on uplink carrier switching**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001307 Switching time between NR between FR1 uplink carriers**

*Type: other For: Approval  
 38.101-1 v..  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001428 CR to TS 38.101-1: Time mask requirements for switching between 1Tx and 2Tx transmissions for inter-band UL CA**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0257 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduction of requirements for UE Tx switching between case 1 and case 2 transmissions for inter-band UL CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001429 CR to TS 38.101-3: Time mask requirements for switching between 1Tx and 2Tx transmissions for inter-band EN-DC without SUL**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0205 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduction of requirements for UE Tx switching between case 1 and case 2 transmissions for inter-band EN-DC without SUL

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001430 Switching between case 1 and case 2 for two NR FR1 carriers**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

we discuss how to capture the RAN4 agreements to the UE requirements and how to conclude the remaining open items in RAN4.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.13.1.7 Transient period capability [NR\_RF\_FR1]

**R4-2000442 Feasibility of on-to-on transient period measurement in FR1**

*Type: other For: Approval  
 Source: Anritsu Corporation*

**Abstract:**

In this contribution we confirm a feasibility of the on-to-on transient period measurement with regards to some conditions described in the previously prepared WF in RAN4 #92bis and #93.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001757 On transient period UE capability**

*Type: other For: Approval  
 38.101-1 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002096 Summarizing the testability of transient capability reporting feature**

*Type: other For: Approval  
 Source: Qualcomm Incorporated, Skyworks Solutions Inc., Verizon, Dish Network, Ericsson, CMCC, Keysight Technologies, Nokia, Nokia Shanghai Bell, Sprint, AT&T, ZTE, Vodafone, Orange, T-mobile, Deutsche Telekom, Telecom Italia, CHTTL, China Telecom, SGS Wireless,*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002143 EVM Measurements for FR1 Transient Period Capability Testability**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.13.2 RRM core requirements (38.133) [NR\_RF\_FR1]

##### 8.13.2.1 RRM requirements for Tx switching between two uplink carriers [NR\_RF\_FR1]

**R4-2000065 Views on DL interruptions during UE switching between 1Tx carrier and 2Tx carrier**

*Type: other For: Decision  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000068 Draft LS to RAN1 on DL reception interruption due to switching between 1Tx carrier and 2Tx carrier**

*Type: LS out For: Approval  
 to RAN1, cc RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000135 View on RRM interruption and delay requirement for switching between two uplink carriers**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000457 Interruption for Tx switching between two uplink carriers**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000640 Discussion on DL interruption Tx switching between two uplink carriers**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000793 On RRM impact of Tx switching**

*Type: other For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000991 On RRM requirements for Tx switching between two uplink carriers**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.14 NR RF requirement enhancements for frequency range 2 (FR2) [NR\_RF\_FR2\_req\_enh]

#### 8.14.1 RF core requirements [NR\_RF\_FR2\_req\_enh]

**R4-2000006 Further considerations on the uplink duty cycle enhancements for the MPE scenario**

*Type: other For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000021 Multi-band requirement framework for FR2 in Rel-16 and beyond**

*Type: other For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000022 [draft] LS response on Multiband relaxation for FR2**

*Type: LS out For: Approval  
 to RAN5  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000235 Correction of the FR2 multi-band requirement framework**

*Type: CR For: Agreement  
 38.101-2 v15.8.0 CR-0096 Cat: F (Rel-15)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000236 Correction of the FR2 multi-band requirement framework**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0097 Cat: A (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002091 Correction of Inner Allocation Definition for Powerclass 3**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0133 Cat: F (Rel-16)  
  
 Source: Motorola Mobility España SA*

**Abstract:**

There are conflicting definitions of the the inner allocations for Powerclass 3 with bandwidth configurations <= 200 MHz. The second definition of the inner allocations conflicts with first definition.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002104 Simplification of In-Band Emissions Requirements**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0134 Cat: D (Rel-16)  
  
 Source: Motorola Mobility España SA*

**Abstract:**

The first term in the general in-band emissions requirement is no longer needed as this term is <= -25 dB and Note 1 sets the lower limit as no less than -25 dB. As a result, the first term of the general in-band emissions requirement is never used.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.1 FR2 MPE [NR\_RF\_FR2\_req\_enh]

**R4-2000114 Further details on agreed signalling methods**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

How and what to report to network under MPE backoff situation. Focus on alert signal and P-MPR reportting and energy headroom reportting

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000124 Discussion on FR2 MPE mitigation**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000197 Remaining issues for MPE issues mitigation**

*Type: other For: Approval  
 Source: InterDigital Communications*

**Abstract:**

This contribution discusses the remaining issues for a preemptive approach solution regarding the MPE mitigation issues in FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000318 View on additional MPE enhancements**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000495 Enhancement on FR2 MPE mitigation**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000955 Rel-16 signaling solution - open issues**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001198 Discussion on enhancement of MPE in rel-16 on FR2**

*Type: other For: Approval  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001231 Further on MPE enhancement**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001324 P-MPR reporting for MPE enhancement**

*Type: other For: Approval  
 Source: Ericsson, Sony*

**Abstract:**

In this contributions we make proposals for reporting of P-MPR values

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001382 UE FR2 MPE enhancements and solutions**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001383 [Draft] LS on MPE enhancements**

*Type: LS out For: Approval  
 to RAN2  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001781 On MPE enhancement\_FR2**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.2 Beam Correspondence based on configured DL RS (SSB or CSI-RS) [NR\_RF\_FR2\_req\_enh]

**R4-2000012 Remaining issues with beam correspondence in Rel-16**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000077 FR2 Beam Correspondence using SSB only**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We propose SSB configuration for verification of beam correspondence based on SSB as the only reference signal

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000078 Beam management CSI-RS design for BC requirement**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We proposed detailed configurations and side condition to support beam correspondence based on CSI-RS

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000079 Further enhancement of Beam Correspondence**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We share views on further enhancement of BC based on reported measurement results

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000199 On FR2 Initial access beam correspondence**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

We explore the initial access BC proposal in more depth towards understanding what the test conditions and requirements may be, and the timelines associated with completion

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000271 Discussion on beam correspondence in Rel-16**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000394 SSB based Beam Correspondence**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000791 On SSB based beam correspondence**

*Type: other For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000858 Views on beam correspondence enhancement based on SSB in Rel-16**

*Type: other For: Discussion  
 38.101 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001065 On the effect of beamforming with CA on beam correspondence**

*Type: other For: Discussion  
 Source: Fraunhofer HHI*

**Abstract:**

In this contribution, we we support recent simulation results on the effect of beamforming with CA on beam correspondence with measurement results.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001199 Discussion on enhancement of BC in rel-16 at FR2**

*Type: other For: Approval  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001232 Environmental condition based beam correspondence enhancement**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001325 Test configuration and requirements for beam correspondence during initital access**

*Type: other For: Approval  
 Source: Ericsson, Sony*

**Abstract:**

In this contribution we complete the proposed test configuration for BC during initial access.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001384 FR2 Beam Correspondence enhancements**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001490 Views on SSB only and CSI-RS only beam correspondence**

*Type: other For: Discussion  
 Source: Sony, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001493 Enhanced reporting for beam correspondence in poor SNR condition**

*Type: other For: Approval  
 Source: Sony*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001761 On beam correspondence enhancement**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001777 TP for beam correspondence based on CSI-RS only**

*Type: pCR For: Approval  
 38.831 v0.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.3 Intra-band cont DL CA for aggregated BW larger than 1400 MHz [NR\_RF\_FR2\_req\_enh]

**R4-2000756 FR2 CA bandwidth classes for aggregated channel BW > 1200 MHz**

*Type: other For: Approval  
 38.101-2 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we share our views on how the FR2 CA bandwidth classes with aggregated bandwidth > 1200 MHz can be better defined and propose the notations for 3 new CA bandwidth classes in fallback group “1” to facilitate the closure of this Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.4 Intra-band non-cont DL CA for aggregated BW larger than 1400 MHz [NR\_RF\_FR2\_req\_enh]

**R4-2000013 Remaining issues with the FR2 frequency separation class**

*Type: other For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000014 CR to 38.101-2 on FR2 frequency separation class enhancement**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0083 Cat: B (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000015 Views on FR2 DL intra-band CA REFSENS**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000207 FR2 DL Intra-band CA BW Enhancement Feature Parameters**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

In this contribution, we capture a UE’s enhanced DL CA BW capability in terms of a parameter set

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000208 TP to TR38.831: FR2 UE architectures for DL Intra-band CA BW Enhancement**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

TP contains UE architecture study supporting the DL CA BW enhancement feature

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000209 LS on FR2 DL Intra-band CA BW Enhancement Feature Parameters**

*Type: LS out For: Approval  
 to RAN2  
 Source: Qualcomm Incorporated*

**Abstract:**

List of parameters to describe enhancement parameter

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000210 FR2 enhanced DL BW definitions**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

In this contribution, we establish definitions of parameters that will serve as building blocks for the Rel-16 FR2 enhancement WI

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000211 Draft CR to 38.101-2: DL CA BW Enhancement for Rel-16**

*Type: draftCR For: Endorsement  
 38.101-2 v16.2.0  
 Source: Qualcomm Incorporated*

**Abstract:**

In this contribution, we capture framework of the DL CA BW enhancement feature

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000759 On FR2 DL intra-band CA cumulative aggregated BW enhancement**

*Type: other For: Approval  
 38.101-2 v..  
 Source: MediaTek Inc.*

**Abstract:**

In this contribution, we provide our views on both the signalling aspects as well as the associated UE RF requirements for supporting the extended DL frequency separation for Rel-16.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001760 On intra-band NC DL CA\_FR2**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.5 Intra-band contiguous UL CA [NR\_RF\_FR2\_req\_enh]

##### 8.14.1.6 Intra-band non-contiguous UL CA [NR\_RF\_FR2\_req\_enh]

**R4-2000019 Non-simultaneous UL for non-contiguous UL CA in FR2**

*Type: other For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000509 FR2 nc-in-ca MPR**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000693 On using Rel-15 CA MPR table format for FR2 NC UL CA**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

In this contribution, we identify a problem with re-using the Rel-15 CA MPR table for Rel-16 NC UL CA. We also propose a non-invasive remedy

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000694 dCR to 38.101-2: Simultaneous NC UL CA framework for Rel-16**

*Type: draftCR For: Endorsement  
 38.101-2 v16.2.0  
 Source: Qualcomm Incorporated*

**Abstract:**

Introduce framework to accommodate simultaneous Rel-16 NC UL CA feature

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002147 Beam squint analysis for FR2 PC3 UEs**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Qualcomm Incorporated*

**Abstract:**

As frequency separation or aggregated BWs increase in CA, the conducted domain mechanisms (like PA nonlinearity) are joined by radiative mechanisms (like beam squint) in reducing a UE’s EIRP or EIS performance. Radiative domain mechanisms for wide BW need

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.7 Inter-band DL CA [NR\_RF\_FR2\_req\_enh]

**R4-2000016 Remaining issues with FR2 inter-band CA**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000017 Views on FR2 DL inter-band CA REFSENS**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000018 EIS spherical coverage for inter-band CA in FR2**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000115 Inter-band CA remaining open requirements**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Discussion and proposal on spherical coverage relaxation for inter-band CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000116 draftCR: Introduction of inter-band CA to 38.101-2**

*Type: draftCR For: Endorsement  
 38.101-2 v16.2.0  
 Source: Qualcomm Incorporated*

**Abstract:**

Intro on 38.101-2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000357 Inter-band CA with/without independent Rx beam**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

Discussion on two flawors of inter-band CA regarding beam management and how to handle the work

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000395 PSD imbalance in Inter-band DL CA**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000443 Test system for inter-band DL CA in FR2**

*Type: other For: Approval  
 Source: Anritsu Corporation*

**Abstract:**

In this contribution we introduce our views on the considerable test system configuration for inter-band DL CA in FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000444 Consideration on two-DL spherical coverage test with power imbalance**

*Type: other For: Approval  
 Source: Anritsu Corporation*

**Abstract:**

In this contribution we introduce our views on a meaning of defining a different PSD condition (power imbalance) with DL signals during the inter-band DL CA spherical coverage measurements.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000445 Consideration on capability of multi signal transmission from single AoA in FR2 OTA test system**

*Type: other For: Approval  
 Source: Anritsu Corporation*

**Abstract:**

In this contribution we consider a capability of multi signal transmission from single AoA (Angle of arrival) in FR2 OTA test system and also provide a view on a necessity of offset antennas as secondary cell or blocker.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000446 Influences of multiple offset antennas in FR2 chamber**

*Type: other For: Approval  
 Source: Anritsu Corporation*

**Abstract:**

This contribution introduces a result of our investigation regarding an influence to the OTA measurement when multiple antennas are arranged as different feed antennas in the FR2 IFF chamber.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000796 FR2 inter-band DL CA relaxation framework**

*Type: other For: Approval  
 Source: MediaTek Beijing Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001044 Discussion on FR2 intra-band DL CA enhancement**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001494 Views spherical coverage relaxation for inter band DL CA**

*Type: other For: Discussion  
 Source: Sony, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001776 On inter band DL CA\_FR2**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001779 TP for inter-band CA refsens FR2\_Rel-16**

*Type: pCR For: Approval  
 38.831 v0.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002114 PSD imbalance for FR2 Inter-band DL CA of 28GHz + 40GHz**

*Type: other For: (not specified)  
 38.101-2 v..  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.8 Improvement of UE MPR [NR\_RF\_FR2\_req\_enh]

**R4-2000396 FR2 CA MPR improvement**

*Type: other For: Approval  
 38.101-2 v..  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000518 FR2 boosting**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.14.1.9 Improvement of spherical coverage requirements for PC3 [NR\_RF\_FR2\_req\_enh]

**R4-2000020 Views on PC3 spherical coverage requirements in Rel-16 and beyond**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000317 View on spherical coverage improvement for Rel-16**

*Type: other For: Approval  
 Source: Samsung*

**Abstract:**

View on spherical coverage improvement for Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000750 Views on spherical coverage enhancement for PC3**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000956 Views on potential spherical coverage enhancements**

*Type: other For: Discussion  
 38.101-2 v..  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001233 About spherical coverage enhancement**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001234 About multi-band relaxation tests**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001495 Views on improvement to spherical coverage requirements for PC3**

*Type: other For: Discussion  
 Source: Sony*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002113 Further discussion on Spherical coverage enhancement**

*Type: other For: (not specified)  
 38.101-2 v..  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.14.2 RRM core requirements (38.133) [NR\_RF\_FR2\_req\_enh]

##### 8.14.2.1 Inter-band DL CA MRTD [NR\_RF\_FR2\_req\_enh]

**R4-2000456 MRTD requirements for FR2 inter-band DL CA**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000786 On MRTD requirement for FR2 inter-band CA**

*Type: other For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001581 Discussion on MRTD requirements for FR2 inter-band DL CA**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.15 NR RRM requirement enhancement [NR\_RRM\_Enh\_Core]

#### 8.15.1 RRM core requirements (38.133) [NR\_RRM\_Enh\_Core]

##### 8.15.1.1 SRS carrier switching requirements [NR\_RRM\_Enh\_Core]

**R4-2000658 Interruption requirements due to SRS carrier switching**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001033 Discussion on Interruption at SRS carrier switch**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001267 CR to 38.133 on SRS carrier switching interruption requirements**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0484 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001268 CR to 36.133 on SRS carrier switching interruption requirements**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6799 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001275 Further discussion on SRS carrier switching RRM requirements**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001661 Discussion on SRS carrier switching interruption**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001662 CR on NR SRS carrier switching interruption in TS 36.133**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6813 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002058 Discussion on remaining issues in SRS carrier switching**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.2 Multiple Scell activation/deactivation [NR\_RRM\_Enh\_Core]

**R4-2000785 On remaining issues for activation delay extension due to multiple SCell**

*Type: other For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001012 On remaining open issues in delay extension of multiple SCell activation**

*Type: other For: Approval  
 Source: NEC*

**Abstract:**

Delay extension requirements for SCell activation during multiple SCell activation is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001034 Discussion on Multiple SCell activation**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001641 Discussion on multiple SCell activation**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002061 Discussion on Multiple SCell activation in NR**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002089 On activation of multiple SCells**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution on requirements for activation of multiple SCells.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.3 CGI reading requirements with autonomous gap [NR\_RRM\_Enh\_Core]

**R4-2001035 Discussion on CGI reading requirement for NR**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001263 CR to 38.133 on CGI reading of NR cell**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0480 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001264 CR to 38.133 on interruption requirements for CGI reading**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0481 Cat: B (Rel-16)  
  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001271 Updated simulation assumption on SIB1 decoding for NR CGI reading**

*Type: other For: Approval  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001272 Simulation results of SIB1 decoding for NR CGI reading**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001273 Further discussion on NR CGI reading with autonomous gaps**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001364 PDSCH simulation result for SI reading**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the number of PDSCH samples for SI reading.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001403 Further considerations on CGI reading for NR**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Paper addressing open issues for NR CGI reading

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001404 LTE CGI measurements with autonomous gaps for 36.133**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6801 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Requirements to read LTE CR in 38.133 according to work spluit

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001405 NR CGI measurements with autonomous gaps for 38.133**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0503 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Requirements to read NR CR in 38.133 according to work split

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001642 Discussion on NR CGI reading requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001643 Simulation results for SIB1 decoding in CGI requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001644 Discussion on LTE CGI reading requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001645 CR to 36.133 on interruption requirements for CGI reading**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6808 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001646 CR to 36.133 on CGI reading of LTE cell**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6809 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002046 discussion on CGI reading with autonomous gap**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

discussion on CGI reading with autonomous gap

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002053 Discussion on interruption requirements for autonomous gaps for CGI reading**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.4 BWP switching on multiple CCs [NR\_RRM\_Enh\_Core]

**R4-2000155 BWP switching delay requirement on**

**multiple CCs**

*Type: other For: Approval  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000156 Interruption time of BWP switching**

**delay on multiple CCs**

*Type: other For: Discussion  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000372 RRM requirements for BWP switching on multiple CCs**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000459 Discussion on BWP requirements for multiple CCs**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001013 Requirements for BWP switch delay on multiple CC**

*Type: other For: Approval  
 Source: NEC*

**Abstract:**

Delay requirements for BWP switching on multiple CC is discussed

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001548 Discussion on BWP switching on multiple CCs**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001851 Analysis of partially overlapped BWP triggering on multiple CCs**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This paper provides further analysis of non-smultaneous BWP switching delay on multiple CCs

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002047 discussion on Interruption requirements with BWP switch on multiple CCs**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on interruption requirements for RRC-based BWP switch considering multiple CCs.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002054 Discussion on timeline for BWP switch for multiple cells**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002090 On simultaneously triggered BWP switching on multiple CCs**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution on simultaneously triggered BWP switching on multiple component carriers.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.5 Inter-frequency measurement requirement without MG [NR\_RRM\_Enh\_Core]

**R4-2000154 Remaining issues on inter-frequency measurement without gap**

*Type: other For: Discussion  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000385 Discussion about inter-frequency measurement without gap**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000460 Inter-frequency measurement requirement without gap**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000644 RRM requirements on inter-frequency measurement without gap**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000645 TP on introducing inter-frequency measurements without measurement gap**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000646 LS on inter-frequency measurement without gap**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000992 Further discussion on inter-frequency measurement requirement**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001663 [Draft] LS on inter-frequency measurement requirement without MG**

*Type: LS out For: Approval  
 to RAN2, RAN1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001664 Discussion on inter-frequency without gap**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002057 Discussion on inter-frequency measurements without gaps**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.6 Mandatory MG patterns [NR\_RRM\_Enh\_Core]

**R4-2000561 Discussion on mandatory MG patterns for FR2**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000638 Further discussion on mandating gap patterns for Rel-16 NR**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000993 Discussion on mandatory measurement gap patterns and applicability**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001269 LS on mandatory of measurement gap patterns**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001274 Further discussion on mandatary of measurement gap patterns**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001345 Discussion on Mandatory GPs for NR Rel-16**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper we give proposal how a new conditional mandatory GP can be introduced and the needed conditions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001400 Considerations on mandatory gap patterns for NR only measurements in release 16**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion on how to handle "NR only" measurement within release 16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001401 Mandatory gap patterns in NR RRM enhancement**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion on which gap patterns should be mandated in release 16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001402 LS on mandatory gap patterns for release 16**

*Type: LS out For: Approval  
 to RAN WG2  
 Source: Ericsson*

**Abstract:**

LS to provide necessary info for RAN2 to work on signalling for NR only gaps in release 16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001665 Discussion on mandatory gap pattern in R-16**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001666 LS on mandatory gap patterns in R16**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001799 Discussion on mandatory MG patterns in Rel-16**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001800 LS on new capability for NR measurement and mandatory MG patterns in Rel-16**

*Type: LS out For: Approval  
 to RAN2  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002063 Further discussion on mandatory measurement gaps**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.7 UE-specific CBW change [NR\_RRM\_Enh\_Core]

**R4-2000461 Delay requirement for UE-specific channel bandwidth change**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002065 Discussion on UE specific channel BW change**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.8 Spatial relation switch for uplink [NR\_RRM\_Enh\_Core]

**R4-2000373 Discussion on requirements for spatial relation info switch for uplink**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001036 Discussion on active spatial relation switch**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001667 Discussion on spatial relation switch for uplink channels and SRS**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002060 Discussion on requirements for spatial relation switch**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002088 On spatial relation switching delay requirements**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Contribution on spatial relation switching delay requirements.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.9 Non-simultaneous UL carrier operation in FR2 [NR\_RRM\_Enh\_Core]

**R4-2002163 On RRM impact of Non-simultaneous UL for non-contiguous UL CA in FR2**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.10 Inter-band CA requirement for FR2 UE measurement capability of independent Rx beam and/or common beam [NR\_RRM\_Enh\_Core]

**R4-2000381 RRM impact on inter-band CA in FR2**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000560 Discussion on inter-band CA requirement for FR2**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001582 Discussion on RRM impacts of FR2 inter-band CA**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002064 RRM requirements with common and independent beams in FR2**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.15.1.11 Others [NR\_RRM\_Enh\_Core]

### 8.16 NR RRM requirements for CSI-RS based L3 measurement [NR\_CSIRS\_L3meas]

#### 8.16.1 RRM core requirements (38.133) [NR\_CSIRS\_L3meas-Core]

##### 8.16.1.1 CSI-RS measurement bandwidth [NR\_CSIRS\_L3meas-Core]

**R4-2000386 Discussion about CSI-RS L3 measurement bandwidth**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000462 Simulation results for CSI-RS measurement BW**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000582 Further discussion on CSI-RS measurement configuration for RRM measurement requirement**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000636 Discussion on CSI-RS measurement bandwidth**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000655 Discussion on CSI-RS measurement bandwidth**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000945 Discussion on CSI-RS parameters on RRM core requirements**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001583 Further discussion on CSI-RS based L3 measurement requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.16.1.2 CSI-RS based intra-frequency and inter-frequency measurements definition [NR\_CSIRS\_L3meas-Core]

**R4-2000387 Discussion about CSI-RS L3 measurement definition**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000463 Definition of Intra and inter frequency for CSI-RS RRM**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000583 Further discussion on definition of CSI-RS based intra-frequency and inter-frequency measurement**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000584 LS on CSI-RS based intra-frequency and inter-frequency Measurement definition**

*Type: LS out For: Approval  
 to RAN2  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000637 Discussion on CSI-RS based intra-frequency measurements definition**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000656 CSI-RS based intra-f and inter-f measurement definition**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000792 On the definition of CSI-RS based intra-frequency and inter-frequency layers**

*Type: other For: Discussion  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000946 Definition of intra-frequency measurement for CSI-RS based L3 measurement**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000994 On definition of CSI-RS based intra-frequency and inter-frequency measurements**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001014 Definition of Intra and Inter-frequency CSI-RS based L3 measurements**

*Type: other For: Approval  
 Source: NEC*

**Abstract:**

Provided our views on the definition of Intra and Inter-frequency CSI-RS based L3 measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001277 Further discussion on definition of CSI-RS based RRM measurements**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001656 Definition for the CSI-RS based intra-frequency and inter-frequency measurement**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001657 [DRAFT] Reply LS on clarification about CSI-RS measurement**

*Type: LS out For: Approval  
 to RAN2, cc RAN1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002055 Discussion on definition for intra and inter-frequency for CSI-RS based RRM measurements**

*Type: other For: Discussion  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.16.1.3 Measurement capability [NR\_CSIRS\_L3meas-Core]

**R4-2000464 Discussion on measurement capability for CSI-RS RRM**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000585 Further discussion on CSI-RS based UE measurement capabilities**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000995 On Measurement capability for CSI-RS L3 measurement**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001276 Further discussion on UE measurement capability of CSI-RS based RRM measurements**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001647 On synchronization assumption for CSI-RS measurement requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.16.1.4 Intra-frequency measurement requirements [NR\_CSIRS\_L3meas-Core]

**R4-2000465 Cell identification requirements for CSI-RS RRM**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000586 Discussion on CSI-RS based measurement requirements**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000947 QCL assumptions for CSI-RS based L3 measurement**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000996 On measurement requirement for CSI-RS based L3 measurements**

*Type: other For: Approval  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001658 Discussion on CSI-RS based L3 measurement requirements and scheduling restriction**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.16.1.5 Inter-frequency measurement requirements [NR\_CSIRS\_L3meas-Core]

##### 8.16.1.6 Others [NR\_CSIRS\_L3meas-Core]

**R4-2000466 Discussion on pre-emption on CSI-RS for L3 measurement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000467 Draft LS on pre-emption on CSI-RS for L3 measurement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000657 Simulation results for CSI-RS based measurements**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001648 On CSI-RS measurement capability**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.17 NR support for high speed train scenario [NR\_HST]

#### 8.17.1 RRM core requirements (38.133) [NR\_HST-Core]

**R4-2000572 Further discussion on RRM requirements in NR HST scenarios**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000632 Discussion on RRM for NR high speed scenario**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000772 On NR HST RRM Requirements**

*Type: other For: Discussion  
 Source: Qualcomm, Inc.*

**Abstract:**

NR HST RRM Requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001346 System simulation results and RRM Requirements NR HST**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper we provide new additional system simulation results using a fully dynamic system simulator, for analyzing connected mode RRM performance under high speed train scenarios

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001389 Considerations on high speed requirements for NR**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion on open issues remaining

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001659 Discussion on the RRM requirements in NR HST**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.1.1 Cell re-selection [NR\_HST-Core]

**R4-2000573 CR on cell re-selection requirements for NR HST**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0447 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000639 38.133 CR on cell re-selection requirements for Rel-16 NR HST**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0456 Cat: B (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001390 TP:High speed enhancements for NR idle mode**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Text proposal for idle mode high speed requirements in 38.133

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.1.2 Cell identification delay [NR\_HST-Core]

**R4-2000159 Discussion on cell identification delay for connected mode UE in NR HST**

*Type: other For: Discussion  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000574 CR on cell identification requirements for NR HST**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0448 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000859 Cell identification delay requirements for DRX case in HST scenario**

*Type: other For: Discussion  
 38.133 v..  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001391 TP:High speed enhancements for NR RRC connected mode**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

TP for connected mode high speed in 38.133

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001660 Discussion on SS-SINR in NR HST**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.1.3 RLM [NR\_HST-Core]

**R4-2001355 RLM for NR HST**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the impact of NR RLM in HST.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.1.4 Beam management [NR\_HST-Core]

**R4-2001356 Beam management for high speed train scenario**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the impact of beam management in HST.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001721 L1-RSRP measurement accuracy and delay for Rel-16 high speed train**

*Type: other For: Discussion  
 38.133 v..  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The document has presented link simulation results for SSB and CSI-RS based L1-RSRP measurement accuracy.

From the simulation results and observations, the following proposals are made:

Proposal 1: SSB-based L1-RSRP measurement accuracy for Rel-15 NR can

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.1.5 Inter-RAT measurement [NR\_HST-Core]

**R4-2000160 Discussion on inter-RAT measurment requirements in NR HST**

*Type: other For: Discussion  
 38.133 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000631 Discussion on inter-RAT measurement requirements for NR HST**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001392 TP: interRAT NR high speed updates in 36.133**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

TP for interRAT high speed in 36.133

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.1.6 Network assistance and UE capability signalling [NR\_HST-Core]

#### 8.17.2 Demodulation and CSI requirements (38.101-4 / 38.104) [NR\_HST-Perf]

##### 8.17.2.1 UE demodulation and CSI requirements (38.101-4) [NR\_HST-Perf]

**R4-2000634 Further discussion on UE demodulation for NR support of high speed scenario**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000948 Release independent applicability for HST requirements**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002072 Views on Tests for High Speed Train Scenarios**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.1.1 Scenarios and transmission schemes [NR\_HST-Perf]

**R4-2000366 Views on DL demodulation requirements for different transmission schemes in NR HST-SFN**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001357 Transmission scheme in NR PDSCH demodulation requirements for HST**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the transmission schemes used in PDSCH demodulation requirements for NR HST.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001454 Discussion on transmission schemes for NR HST UE demodulation requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per approved WF R4-1915926, this contribution further shares our views on the transmission scheme for NR HST performance requirements definition

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.1.2 Requirements for HST-SFN [NR\_HST-Perf]

**R4-2000303 Simulation results for UE demodulation requirements under HST single tap**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000367 Views on NR UE demodulation requirements for HST-SFN scenario with JT operation**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000949 Views on HST-SFN for NR**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001497 Discussion and simulation results on NR UE HST performance requirements under SFN**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per WF R4-1915926, share our views on the maximum Doppler shift and MCS based on our simulation results.

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.1.3 Requirements for HST single tap [NR\_HST-Perf]

**R4-2000304 Simulation results for UE demodulation requirements under HST SFN**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000368 Views on NR UE demodulation requirements for HST single tap scenario**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000950 Views on HST single tap for NR**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001358 Discussion on PDSCH demodulation performance with HST single tap**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE receiver assumption for PDSCH demodulation performance with HST single tap.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001455 Discussion and simulation results on NR UE HST performance requirements under single-tap**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per WF R4-1915926, share our views on the maximum Doppler shift and MCS based on our simulation results.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001736 Simulation results for NR UE HST single tap**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results based on the assumptions found in WF

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.1.4 Requirements for multi-path fading channels [NR\_HST-Perf]

**R4-2000305 Simulation results for UE demodulation requirements under fading channel with high Doppler value**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000369 Views on NR UE demodulation requirements for HST scenario with fading channel conditions**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000951 Views on High-speed multi-path fading channels**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001456 Discussion and simulation results on NR UE HST performance requirements under multi-path fading channel**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per WF R4-1915926, share our views on the selection of MCS and Rank based on our simulation results.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001737 Simulation results for HST Multipath fading channels**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results based on the assumptions found in WF.

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.1.5 Network assistance and UE capability signalling [NR\_HST-Perf]

**R4-2001457 Discussion on the requirement definition for NR UE HST single tap channel**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per WF R4-1915926, share our views on how to define the requirements for single tap.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.17.2.2 BS demodulation requirements (38.104) [NR\_HST-Perf]

**R4-2000613 Summary of ideal and impairment results for NR HST demodulation requirements**

*Type: other For: Agreement  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001687 NR Rel-16 HST BS demodulation PUSCH and UL TA simulation results**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution, we provide the results of our simulation campaign taking into account the changes agreed in the last meeting, e.g., center frequency, max doppler shift, etc.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001689 On NR Rel-16 HST BS demodulation PUSCH and UL TA requirements**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The few remaining open issues mentionned in the last WF are clustered around: PUSCH 1x1, PUSCH 500kph MCS, PUSCH l0 value simulation alignment, and UL TA SRS placement

Open issues not yet captured in the meetings are, a possible 350/500kph conformance tes

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.2.1 PUSCH requirements [NR\_HST-Perf]

**R4-2000306 Discussion and initial simulation results for NR HST PUSCH**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000404 Simulation results for Rel-16 NR HST PUSCH demodulation performance at UE speed of 350 km/h**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

simulation results for HST PUSCH demodulation at 350km/h

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000405 Simulation results for Rel-16 NR HST PUSCH demodulation performance at UE speed of 500 km/h**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

simulation results for HST PUSCH demodulation at 500km/h

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000608 Discussion on Front loaded DMRS start symbol for NR HST PUSCH**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000609 Discussion on antenna configuration and MCS for NR HST PUSCH**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000610 Initial simulation results for NR HST PUSCH demodulation requirement**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000633 Simulation results on PUSCH for NR support of high speed scenario**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000807 Simulation results for NR HST PUSCH**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001184 Introducting of conformance tests for 350km/h HST**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0121 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Introduces conformance for HST 350km/h

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001185 Introduction of HST 350km/h FRCs and channel model**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0122 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Introduces conformance for HST 350km/h

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001195 Views on NR PUSCH for high speed**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001458 Discussion on NR HST PUSCH performance requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the WF R4-1915886, share our views about the BS demodulation requirements for NR Rel-16 HST

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001459 Simulation results on NR HST PUSCH performance requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the WF R4-1915886, provide our simulation results on NR HST PUSCH performance requirement for alignment

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001690 CR for 38.104: HST PUSCH demodulation requirements introduction**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0157 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add new section for PUSCH performance under high speed train conditions assuming a UE velocity up to 350km/h.

**Decision:** The document was **not treated**.

**R4-2001691 CR for 38.104: HST PUSCH demodulation Annex including both FRC and channel model**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0158 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add HST scenario 1-NR350 and scenario 3-NR350 as Annex G.3.

Add new FRCs for performance requirements in high speed train scenarios within Annex A.3 (MCS2) and A.4 (MCS16), for DM-RS Pos2 configuration.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001802 CR for TS 38.141-1: Introduction of NR PUSCH performance requirements for HST**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0109 Cat: B (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001803 CR for TS 38.141-1: Introduction of NR PUSCH performance Annex including both FRC and channel model for HST**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0110 Cat: B (Rel-16)  
  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.2.2 PRACH requirements [NR\_HST-Perf]

**R4-2000307 Ideal and impairment simulation results for NR HST PRACH**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000407 Simulation results for PRACH HST with 350km/h**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

simulation results for HST PRACH demodulation at 350km/h

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000408 Simulation results for PRACH HST with 500km/h**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

simulation results for HST PRACH demodulation at 500km/h

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000611 Initial simulation results for NR HST PRACH demodulation requirement with PRACH format 0**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000612 Initial simulation results for NR HST PRACH demodulation requirement with PRACH short sequence format**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000809 Simulation results for NR HST PRACH**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001471 Ideal and impairment simulation results for NR HST PRACH format 0**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our simulation results

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001472 Ideal and impairment simulation results for NR HST PRACH short sequence format**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our simulation results

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001473 CR for TS 38.104: Introduction of PRACH demodulation requirements for NR HST**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0156 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Introduce new PRACH HST requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001474 CR for TS 38.141-1: Introduction of PRACH performance requirements for NR HST**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0101 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Introduce new PRACH HST requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001475 CR for TS 38.141-2: Introduction of PRACH performance requirements for NR HST**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0126 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Introduce new PRACH HST requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001688 NR Rel-16 HST BS demodulation PRACH remaining issues and simulation results**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we discuss the final open issue on fading channels and provide our simulation results.

**Discussion:**

.

**Decision:** The document was **not treated**.

###### 8.17.2.2.3 UL timing adjustment requirements [NR\_HST-Perf]

**R4-2000308 Discussion and initial simulation results for NR UL timing adjustment**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000406 Simulation results for Rel-16 NR PUSCH UL timing adjustment**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

simulation results for HST UL timing adjustment and observations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000805 CR for 38.104: introduction of UL timing adjustment**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0137 Cat: C (Rel-16)  
  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000806 CR for 38.104: Appendix for UL timing adjustment**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0138 Cat: C (Rel-16)  
  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000808 Simulation results for NR UL timing adjustment**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001460 Discussion on the UL timing adjustment**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the WF R4-1915886, share our views on the remaining needed test parameters and give our proposal on simulation assumption for UL timing adjustment

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.18 NR performance requirement enhancement [NR\_perf\_enh-Perf]

#### 8.18.1 UE demodulation and CSI requirements (38.101-4) [NR\_perf\_enh-Perf]

**R4-2001445 Discussion on release independence for NR Rel-16 enhanced UE demodulation requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the agreements made in RAN4#93, this contribution shares our views about the release independence aspects for NR Rel-16 UE demodulation requirements including normal CA, PMI and LTE TDD - NR coexistence

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.18.1.1 NR CA PDSCH requirementS [NR\_perf\_enh-Perf]

**R4-2000136 On NR CA PDSCH normal demodulation requirements**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000137 Initial simulation results for NR CA PDSCH normal demodulation requirements**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000359 Discussion on NR CA UE demodulation requirements**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000360 Simulation results for Normal CA requirements**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000361 Summary of Normal CA simulation results (FR1 15 kHz FDD and TDD)**

*Type: other For: Information  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000362 Summary of Normal CA simulation results (FR1 30 kHz TDD)**

*Type: other For: Information  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000363 Summary of Normal CA simulation results (FR2)**

*Type: other For: Information  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000647 Discussion on NR CA PDSCH normal demodulation**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000952 Views on normal PDSCH demodulation test for NR CA**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001354 Simulation result of NR PDSCH demodulation requirements with CA**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides the simulation results for PDSCH for CA and also discussed MCS/rank for FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001419 Views on NR CA PDSCH Demodulation Performance Tests**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001444 Simulation Results for NR CA PDSCH Demodulation Performance Tests**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001446 Simulation results on NR UE normal CA performance requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the WF R4-1915863, provide our simulation results onNR UE normal CA performance requirements for alignment

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001447 Discussion on NR Rel-16 UE CA normal demodulation requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per WF R4-1915863, this contribution shares our views on those open issues for NR UE CA normal performance requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001448 Discussion on HARQ timing for NR UE normal CA performance requirements**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per WF R4-1915863, this contribution shares our analysis and views for all TDD-FDD CA and TDD-TDD CA with different numerology

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.18.1.2 PMI reporting requirements with larger number of Tx ports [NR\_perf\_enh-Perf]

**R4-2000138 Discussion on PMI reporting requirements for larger number of Tx ports**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000139 Initial simulation results for wideband PMI reporting requirements**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000300 Simulation results of PMI test cases**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000301 Initial simulation results for PMI reporting with type II codebook**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000302 Test case design for PMI reporting with Type II codebook**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000374 Simulation results for PMI test cases with 16,32 ports**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001476 Ideal and impairment simulation results for PMI reporting test**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Give our simulation results

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001477 Discussion on PMI Type I test of Tx ports larger than 8**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discuss and give our views on PMI Type I test

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001478 Discussion on PMI Type II test for Tx ports larger than 8**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

Discuss and give our proposals on PMI Type II test

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001733 Simulation results for CSI PMI test cases**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this paper we provide simulation results based on the assumptions found in WF and detailed simulation assumptions

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001734 Summary of simulation results of NR UE CSI with 16, and 32Tx antennas**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution summarizes simulation results for NR UE PMI for up to 32 antenna ports

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002041 Parameters and simulation results on PMI reporting requirements with larger number of Tx ports**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.18.1.3 LTE-NR co-existence for TDD [NR\_perf\_enh-Perf]

**R4-2000364 CR to TS 38.101-4: LTE-NR coexistence requirements for TDD mode (R16)**

*Type: CR For: Agreement  
 38.101-4 v15.4.0 CR-0035 Cat: B (Rel-16)  
  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001861 Simulation results for TDD LTE-NR Coexistence**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.18.1.4 FR1 CA power imbalance requirements [NR\_perf\_enh-Perf]

**R4-2000140 FR1 CA PDSCH demodulation requirement with power imbalance**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000365 Discussion on FR1 CA power imbalance requirements**

*Type: other For: Discussion  
 Source: Intel Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000953 Further discussion on power imbalance requirement for intra-band EN-DC/NR CA**

*Type: other For: Discussion  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.18.2 BS demodulation requirements (38.104) [NR\_perf\_enh-Perf]

##### 8.18.2.1 30% TP test point [NR\_perf\_enh-Perf]

**R4-2000141 PUSCH demodulation requirements for 30% throughput**

*Type: other For: Discussion  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000299 Discussion and initial results for NR demodulation performance in Rel-16**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000403 Discussion on PUSCH demodulation requirements at 30% throughput test point**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

simulation results for 30% throughput and observations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000614 Discussion on PUSCH performance requirement with 30% throughput metric**

*Type: other For: Agreement  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000615 CR for TS38.104: Introducing PUSCH performance requirements at 30% throughput testing point**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0130 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000616 CR for TS38.141-1: Introducing PUSCH performance requirements at 30% throughput testing point**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0088 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000617 CR for TS38.141-2: Introducing PUSCH performance requirements at 30% throughput testing point**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0107 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000811 Discussion on Rel-16 demodulation requirements for 30% throughput testing points**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000812 Simulation results for NR PUSCH with 30% throughput**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001194 Remaining issues on 30% TP test point for BS demodulation**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001449 Discussion on the PUSCH performance requirements at 30% max throughput test point**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

As per the agreements made in RAN4#93, this contributions further share our view about the NR PUSCH 30% TP test point testing

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001692 NR Rel-16 performance requirement enhancement BS demodulation simulation results and general discussion**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we deliver our simulation results and discuss the remaining open points (PT-RS and DM-RS configuration) for 30% TPUT test points.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 8.18.2.2 Additional FR2 requirements [NR\_perf\_enh-Perf]

**R4-2000142 Summary of ideal and impairment results for FR2 PUSCH 2T2R MCS12**

*Type: other For: Information  
 Source: China Telecom*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000799 CR for 38.104: new FRC tables for FR2 PUSCH 2T2R MCS12**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0136 Cat: C (Rel-16)  
  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000800 CR for 38.141-2: new FRC tables for FR2 PUSCH 2T2R MCS12**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0116 Cat: C (Rel-16)  
  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001693 CR for 38.104: Performance requirements for FR2 PUSCH 2T2R 16QAM**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0159 Cat: C (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

SNR of performance requirements for FR2 PUSCH 2T2R 16QAM, in section 11 is unachievable. Implement previously agreed changes to rectify.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001694 CR for 38.141-2: Radiated test requirements for FR2 PUSCH 2T2R 16QAM**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0132 Cat: C (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

SNR of performance requirements for FR2 PUSCH 2T2R 16QAM, in section 8 is unachievable. Implement previously agreed changes to rectify.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.19 Over the air (OTA) base station (BS) testing TR [OTA\_BS\_testing-Perf]

**R4-2001698 TP to TR 37.9xx : Test uncertainty annexes**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Test unceratinty annexes for the OTA testing TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001699 OTA BS testing Tx FR1 MU calculation tables**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Cover sheet for the FR1 Tx MU budget spreadsheet

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001700 OTA BS testing Tx FR2 MU calculation tables**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Cover sheet for the FR2 Tx MU budget spreadsheet

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001701 OTA BS testing RX FR1 MU calculation tables**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Cover sheet for the FR1 Rx MU budget spreadsheet

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001702 OTA BS testing FR1 co-location MU calculation tables**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Cover sheet for the FR1 co-location MU budget spreadsheet

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001703 TP to TR 37.9xx : Colocation MU value derivation sub-clause updates**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Update and clarify the co-location MU derivation subclause.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001704 TP to TR 37.9xx - OTA BS testing summary clauses 17-18**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

Summary table sections for MU and TT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001705 TP to TR 37.9xx -Tx MU value derivation sub-clause update**

*Type: other For: Approval  
 Source: Huawei*

**Abstract:**

TP to update MU and TT sub-clauses with agreed MU tables for each Tx requirement.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001715 TP to OTA BS TR on EMC**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.19.1 General (such as work plan, AH minutes) [OTA\_BS\_testing-Perf]

**R4-2001806 Work-plan for the OTA BS testing WI**

*Type: other For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide description of the work-flow used to general the External TR (i.e. RF conformance testing background for radiated BS requirements) content for the OTA BS testing WI.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001807 Skeleton for TR 37.941 on OTA BS testing, Rel-15**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

In the attached document we provide skeleton for the External TR (i.e. RF conformance testing background for radiated BS requirements) for OTA BS testing WI, Rel-15.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001823 Big TP for TR 37.941, Rel-15**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

Placeholder TP for the External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for all the agreed TPs from the e-meeting to be implemented for Rel-15 version of the TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.19.2 Others [OTA\_BS\_testing-Perf]

**R4-2001808 TP to the TR 37.941: Scope**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the Scope section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001809 TP to the TR 37.941: general sections**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the references, definitions, symbols and abbreviations sections.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001810 TP to the TR 37.941: Coordinate system**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the coordinate system section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001811 TP to the TR 37.941: conformance testing framework**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the conformance testing framework section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001812 TP to the TR 37.941: measurement types**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the measurement types section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001813 TP to the TR 37.941: OTA measurement systems**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the OTA measurement systems section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001814 TP to the TR 37.941: measurement systems calibration**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the measurement systems calibration section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001815 TP to the TR 37.941: TX directional requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the TX directional requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001816 TP to the TR 37.941: RX directional requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the RX directional requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001817 TP to the TR 37.941: In-band TRP requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the in-band TRP requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001818 TP to the TR 37.941: Out-of-band TRP requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the OoB TRP requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001819 TP to the TR 37.941: Out-of-band blocking requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the OoB blocking requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001820 TP to the TR 37.941: Demodulation performance requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the demodiulation performance requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001821 TP to the TR 37.941: EMC requirements**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the EMC requirements section.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001822 TP to the TR 37.941: annex D, E, F**

*Type: pCR For: Approval  
 37.941 v0.0.1  
 Source: Huawei*

**Abstract:**

TP to External TR (i.e. RF conformance testing background for radiated BS requirements) on OTA BS testing for the annexes D, E, F on beam sweeping, sparse sampling and power density measurement close to BS.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.20 2-step RACH for NR [NR\_2step\_RACH-Perf]

**R4-2000802 2-step RACH workplan**

*Type: other For: Approval  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.20.1 BS Demodulation requirements (38.104/38.141-1/38.141-2) [NR\_2step\_RACH-Perf]

**R4-2000314 View on BS demodulation requirement for NR 2-step RACH**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000801 BS demodulation requirements for 2-step RACH**

*Type: other For: Discussion  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001183 On 2 step RACH demodulation**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Proposal for no requirement for 2 step RACH

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001491 On 2-step RACH BS demodulation requirements**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents the initial discussion on base station demodulation requirements for 2-step RACH

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 8.20.2 Others [NR\_2step\_RACH-Perf]

**R4-2001279 Discussion on RRM requirements for 2-step RACH**

*Type: other For: Discussion  
 Source: ZTE*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001492 On RRM core requirements for 2-step RACH**

*Type: other For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents the initial discussion on RRM core requirements for 2-step RACH.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002129 Impact of Two Step RACH WI in RRM requirements**

*Type: other For: (not specified)  
 Source: Qualcomm*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 8.21 SON/MDT Support for NR [NR\_SON\_MDT]

#### 8.21.1 MDT related RRM requirements (38.133, 36.133) [NR\_SON\_MDT-Core]

**R4-2000648 Discussion on RRM requirements for Rel-16 MDT**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000649 CR on logged MDT requirements (2, 3.3, 4.3, 5.3)**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0457 Cat: B (Rel-16)  
  
 Source: CMCC, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000650 CR on logged MDT requirements (2, 4.3)**

*Type: CR For: Agreement  
 36.133 v16.4.0 CR-6795 Cat: B (Rel-16)  
  
 Source: CMCC, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001671 Discussion on SON/MDT support for NR on RRM impact**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001951 On UE requirements for NR MDT**

*Type: other For: Discussion  
 Source: Ericsson, CMCC*

**Abstract:**

On UE requirements for NR MDT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001952 Response LS on MDT Measurements**

*Type: LS out For: Approval  
 to RAN2  
 Source: Ericsson*

**Abstract:**

Response LS on MDT Measurements

**Discussion:**

.

**Decision:** The document was **not treated**.

## 9 Rel-16 spectrum related Work Items for NR

**R4-2000130 New WI Proposal: LTE / NR Spectrum sharing in Band 40/n40 for LTE-NR Coexistence**

*Type: WID new For: Information  
 Source: Reliance Jio*

**Abstract:**

To start discussion / work pertaining to LTE-NR Coexistance in Band 40/ n40. The primary intention is to enable 5G NR band n40 to dynamically share the LTE Band 40 (2300-2400 MHz)

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.1 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y) [NR\_CA\_R16\_intra]

#### 9.1.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_intra-Core /Perf]

**R4-2001499 Revised WID NR Intra-band Rel-16**

*Type: WID revised For: Agreement  
 Source: Ericsson*

**Abstract:**

Revised WID NR Intra-band Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001502 TR 38.716-01-01 v0.9.0 Rel-16 NR Intra-band**

*Type: draft TR For: Approval  
 38.716-01-01 v0.8.0  
 Source: Ericsson*

**Abstract:**

TR 38.716-01-01 v0.9.0 Rel-16 NR Intra-band

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001506 TP for TR 38.716-01-01 for updated scope from RAN #86**

*Type: pCR For: Approval  
 38.716-01-01 v0.8.0  
 Source: Ericsson*

**Abstract:**

TP for TR 38.716-01-01 for updated scope from RAN #86

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001510 CR introduction completed band combinations 38.716-01-01 -> 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0258 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-01-01 -> 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001511 CR introduction completed band combinations 38.716-01-01 -> 38.101-2**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0124 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-01-01 -> 38.101-2

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001515 Rel-16 CR to 38.101-1 for editorial corrections**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0260 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR to 38.101-1 for editorial corrections

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001516 Rel-16 CR to 38.101-2 for editorial corrections**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0261 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR to 38.101-2 for editorial corrections

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2002025 Rel-16 CR to 38.101-2 for editorial corrections**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0132 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR to 38.101-2 for editorial corrections

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.1.2 UE RF for FR1 [NR\_CA\_R16\_intra-Core]

**R4-2000127 Editorial correction of NR CA bandwidth classe**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Verizon, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000328 CR to TS 38.101-1 on corrections to intra-band non-contiguous CA operating bands (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0204 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-1 on corrections to intra-band non-contiguous CA operating bands (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000418 CR for 38.101-1: Corrections to intra-band CA tables**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0211 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000520 CA\_n48B A-MPR**

*Type: other For: (not specified)  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000563 CR to TS 38.101-1 on corrections to NR CA bandwidth classes (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0226 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Abstract:**

CR to TS 38.101-1 on corrections to NR CA bandwidth classes (Rel-16)

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000794 TP for TR 38.716-01-01: CA\_3DL\_n77(3A)\_1UL\_n77A**

*Type: pCR For: Approval  
 38.716-01-01 v0.7.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002051 draftCR for TS 38.101-1 intra-band UL contiguous CA combinations**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.1.3 UE RF for FR2 [NR\_CA\_R16\_intra-Core]

### 9.2 NR inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1, 2) [NR\_CADC\_R16\_2BDL\_xBUL]

#### 9.2.1 Rapporteur Input (WID/TR/CR) [NR\_CADC\_R16\_2BDL\_xBUL-Core/Perf]

**R4-2000497 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0222 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000498 CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0178 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000502 Revised WID on Rel-16 NR Inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1,2)**

*Type: WID revised For: Agreement  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000803 TR 38.716-02-00 v090**

*Type: draft TR For: Approval  
 38.716-02-00 v0.9.0  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.2.2 NR inter band CA without any FR2 band(s) [NR\_CADC\_R16\_2BDL\_xBUL-Core]

**R4-2000128 Editorial correction of band n66 bandwidth**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Verizon, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000143 TP for TR38.716-02-00: Requirements for DL CA\_n29A-n70A, DL CA\_n29A-n66B, DL CA\_n29A-n66(2A) and for UL CA\_n66A-n71A, UL CA\_n70A-n71A**

*Type: pCR For: Approval  
 38.716-02-00 v0.8.0  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000181 TP to TR 38.716-02-00: CA\_n28-n78**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Nokia, Nokia Shanghai Bell, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000183 TP to TR 38.716-02-00: CA\_n41-n66**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Nokia, Nokia Shanghai Bell, T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000184 TP to TR 38.716-02-00: CA\_n41-n71**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Nokia, Nokia Shanghai Bell, T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000189 TP to TR 38.716-02-00: Corrections to CA\_n5-n261 and CA\_n66-n261**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000448 CR to TS 38.101-1: Corrections on MSD tables for CA\_n20-n78 and CA\_n66-n78**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0216 Cat: F (Rel-16)  
  
 Source: Xiaomi*

**Abstract:**

1. The superscript of n78 for the band combination of n20 and n78 since only 4th harmonic shall be considered.

2. The superscript 1 is missing for the band combination of n66 and n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000478 TP for TR 38.716-02-00: CA\_n3A-n38A**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000691 TP for TR 38.716-02-00 CA\_n2A\_n66A**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000692 TP for TR 38.716-02-00 CA\_n5A\_n66A**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000831 TP for TR 38.716-02-00: CA\_n2-n78**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000832 TP for TR 38.716-02-00: CA\_n38-n66**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000833 TP for TR 38.716-02-00: CA\_n7-n25**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000834 TP for TR 38.716-02-00: CA\_n25-n66**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000835 TP for TR 38.716-02-00: CA\_n25-n78**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000836 TP for TR 38.716-02-00: CA\_n66A-n78(2A)**

*Type: pCR For: Approval  
 38.716-02-00 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001060 Updated TP for TR 38.716-02-00: CA\_n1A-n78(2A)**

*Type: pCR For: Approval  
 38.716-02-00 v0.8.0  
 Source: Huawei, HiSilicon, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001061 TP for TR 38.716-02-00: CA\_n20-n75**

*Type: pCR For: Approval  
 38.716-02-00 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001062 Draft CR for 38.101-1 to correct editoral errors**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001071 Discussion on improvement of Reference sensitivity exception table in 38.101-1 and 38.101-3**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001072 CR for 38.101-1: improvement of Reference sensitivity exception table (Rel-16)**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0245 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001073 CR for 38.101-3: improvement of Reference sensitivity exception table (Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0197 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001076 Discussion on introduction of some sub-clause title for NR inter-band CA**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001519 TP for TR 38.716-02-00 to include CA\_n20-n78**

*Type: pCR For: Approval  
 38.716-02-00 v0.8.0  
 Source: Ericsson, Telia, BT plc*

**Abstract:**

TP for TR 38.716-02-00 to include CA\_n20-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.2.3 NR inter band CA with at least one FR2 band [NR\_CADC\_R16\_2BDL\_xBUL-Core]

**R4-2000986 CR to TS 38.101-3: adding 90MHz channel BW support for Rel.16 CA\_n78A-n257 configurations**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0195 Cat: B (Rel-16)  
  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.3 EN-DC of 1 LTE band and 1 NR band [DC\_R16\_1BLTE\_1BNR\_2DL2UL]

#### 9.3.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core/Perf]

**R4-2000881 Updated TR 37.716-11-11 V1.0.0 Rel.16 1 LTE band + 1 NR band EN-DC**

*Type: draft TR For: Approval  
 37.716-11-11 v0.1.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000886 Revised WID for EN-DC of 1 band LTE + 1 band NR**

*Type: WID revised For: Agreement  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000887 CR on introduction of completed EN-DC of 1 band LTE and 1 band NR**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0190 Cat: B (Rel-16)  
  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001517 Rel-16 CR to 38.101-3 for editorial corrections**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0208 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Rel-16 CR to 38.101-3 for editorial corrections

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001518 Rel-15 CR to 38.101-3 for editorial corrections**

*Type: CR For: Agreement  
 38.101-3 v15.8.0 CR-0209 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Rel-15 CR to 38.101-3 for editorial corrections

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.3.2 EN-DC without FR2 band [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core]

**R4-2000096 TP for TR 38.716-11-11 for DC\_2A\_n48B**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000097 TP for TR 37.716-11-11: DC\_66\_n48**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000098 TP for TR 37.716-11-11: DC\_13A\_n48B**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000099 TP for TR 37.716-11-11: DC\_5A\_n48B**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000100 TP for TR 37.716-11-11: DC\_5\_n2**

*Type: other For: Discussion  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000101 TP for TR 37.716-11-11: DC\_5\_n66A**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000474 TP for TR37.716-11-11:DC\_13\_n78**

*Type: pCR For: Approval  
 37.716-11-11 v1.0.0  
 Source: ZTE Corporation, Bell, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000488 CR to TS 38.101-3: Updated the MSD values for ENDC 3-n41**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0175 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000540 TP for TR 37.716-11-11: DC\_66\_n12**

*Type: pCR For: Approval  
 37.716-11-11 v0.1.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000541 TP for TR 37.716-11-11: DC\_48\_n71**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000707 CR for 38.101-3: Correction of MOP tolerance for DC\_39\_n41**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0186 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000764 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_8\_n77, 11\_n77 and 28\_n77**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000774 TP for TR 37.716-11-11: DC\_11\_n3**

*Type: pCR For: Approval  
 37.716-11-11 v0.1.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000775 TP for TR 37.716-11-11: DC\_11\_n28**

*Type: pCR For: Approval  
 37.716-11-11 v0.1.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000837 TP for TR 37.716-11-11: DC\_13\_n7**

*Type: pCR For: Approval  
 37.716-11-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000838 TP for TR 37.716-11-11: DC\_13\_n78**

*Type: pCR For: Approval  
 37.716-11-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000839 TP for TR 37.716-11-11: DC\_66\_n38**

*Type: pCR For: Approval  
 37.716-11-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000853 TP to TR 37.716-11-11 DC\_20A\_n41A**

*Type: pCR For: Approval  
 37.716-11-11 v0.1.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000855 TP for TR 37.716-11-11: DC\_71A\_n48A**

*Type: other For: (not specified)  
 Source: Comcast*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000857 Cat. A CR to introduce new BCS of intra-band continuous EN-DC for TS 38.101-3(Rel-16)**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0189 Cat: A (Rel-16)  
  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001046 TP to TR 37.716-11-11: DC\_28\_n5**

*Type: pCR For: Approval  
 37.716-11-11 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001047 TP for TR 37.716-11-11: DC\_3A\_n8A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001048 TP for TR 37.716-11-11: DC\_7A\_n8A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001078 draft CR for 38.101-3 to correct editoral errors for spurious emissions for UE co-existence**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001287 TP for 37.716-11-11 to introduce DC\_48\_n5**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001288 TP for 37.716-11-11 to introduce DC\_48\_n66**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001298 TP for 37.716-11-11 to introduce DC\_12\_n25**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001524 TP for TR 37 716-11-11 to include DC\_12A\_n78A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_12A\_n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001525 TP for TR 37 716-11-11 to include DC\_12A\_n38A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_12A\_n38A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001526 TP for TR 37 716-11-11 to include DC\_5A\_n38A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_5A\_n38A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001527 TP for TR 37 716-11-11 to include DC\_12A\_n7A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_12A\_n7A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001528 TP for TR 37 716-11-11 to include DC\_66A\_n7A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_66A\_n7A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001529 TP for TR 37 716-11-11 to include DC\_71A\_n38A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_71A\_n38A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001530 TP for TR 37 716-11-11 to include DC\_71A\_n66A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_71A\_n66A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001531 TP for TR 37 716-11-11 to include DC\_71A\_n78A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_71A\_n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001969 TP for TR 37 716-11-11 to include DC\_2A\_n12A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_2A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001970 TP for TR 37 716-11-11 to include DC\_5A\_n12A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_5A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001971 TP for TR 37 716-11-11 to include DC\_48A\_n5A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_48A\_n5A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001972 TP for TR 37 716-11-11 to include DC\_48A\_n12A**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_48A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001973 TP for TR 37 716-11-11 to include DC\_12\_n71**

*Type: pCR For: Approval  
 37.716-11-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-11-11 to include DC\_12\_n71

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002003 draft Rel-16 CR to 38.101-3 to add missing CA\_n7B UL for two band DC combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, Telstra*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add missing CA\_n7B UL for two band DC combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002009 draft Rel-16 CR to 38.101-3 to add new configurations for 2\_n41, 66\_n41 to existing combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, T-Mobile US*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add new configurations for 2\_n41, 66\_n41 to existing combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002049 TP for TR 37.716-11-11: DC\_(n)48 and DC\_48\_n48**

*Type: pCR For: Approval  
 37.716-11-11 v0.1.0  
 Source: Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002109 TP for TR 37.716-11-11:DC\_48B\_n71A**

*Type: other For: (not specified)  
 Source: Comcast*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002111 TP for TR 37.716-11-11: DC\_48C\_n71A**

*Type: other For: (not specified)  
 Source: Comcast*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002112 TP for TR 37.716-11-11: DC\_48D\_n71A**

*Type: other For: (not specified)  
 Source: Comcast*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.3.3 EN-DC with FR2 band [DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core]

**R4-2000126 Introduction of completed EN-DC of 1 band LTE and 1 band NR**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Verizon, Ericsson*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.4 EN-DC of 2 LTE band and 1 NR band [DC\_R16\_2BLTE\_1BNR\_3DL2UL]

#### 9.4.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core/Perf]

**R4-2000840 TR 37.716-21-11 v0.9.0**

*Type: draft TR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000841 Revised WID: Dual Connectivity (EN-DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Agreement  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000842 CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#94-e into TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0187 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.4.2 EN-DC without FR2 band [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core]

**R4-2000237 TP for TR 37.716-21-11: DC\_2-2-13\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000238 TP for TR 37.716-21-11: DC\_2-5\_n2 and DC\_2-5-5\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000239 TP for TR 37.716-21-11: DC\_2-5\_n5 and DC\_2-2-5\_n5**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000240 TP for TR 37.716-21-11: DC\_2-5\_n66 and DC\_2-5-5\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000241 TP for TR 37.716-21-11: DC\_2-13\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000242 TP for TR 37.716-21-11: DC\_2-13\_n5 and DC\_2-2-13\_n5**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000243 TP for TR 37.716-21-11: DC\_2-66\_n48 and DC\_2-66-66\_n48**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000244 TP for TR 37.716-21-11: DC\_5-5-66\_n66 and DC\_5-5-66-66\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000245 TP for TR 37.716-21-11: DC\_5-13\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000246 TP for TR 37.716-21-11: DC\_5-66\_n2, DC\_5-5-66\_n2, DC\_5-66-66\_n2 and DC\_5-5-66-66\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000247 TP for TR 37.716-21-11: DC\_5-66\_n66 and DC\_5-66-66\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000248 TP for TR 37.716-21-11: DC\_5-66-66\_n5**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000249 TP for TR 37.716-21-11: DC\_13-46\_n5**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000250 TP for TR 37.716-21-11: DC\_13-66\_n2 and DC\_13-66-66\_n2**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000251 TP for TR 37.716-21-11: DC\_13-66\_n48 and DC\_13-66-66\_n48**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000252 TP for TR 37.716-21-11: DC\_13A-66A-66A\_n66A**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000416 TP for TR 37.716-21-11: DC\_25A-41D\_n41A correction**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000417 CR for 38.101-3: DC\_25-41\_n41 correction**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0166 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000479 TP for TR37.716-21-11: DC\_5A-66A\_n78**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: ZTE Corporation, Bell, Telus*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000528 TP to TR 37.716-21-11: DC\_(n)12AA**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000529 TP to TR 37.716-21-11: DC\_(n)5AA**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000530 TP to TR 37.716-21-11: DC\_2A-12A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000531 TP to TR 37.716-21-11: DC\_5A-12A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000532 TP to TR 37.716-21-11: DC\_2A-5A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000533 TP to TR 37.716-21-11: DC\_2A-48A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000534 TP to TR 37.716-21-11: DC\_5A-48A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000535 TP to TR 37.716-21-11: DC\_48A\_(n)12AA**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000536 TP to TR 37.716-21-11: DC\_66A\_(n)12AA**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000740 Draft CR to TS 38.101-3: Adding DC\_1A-7C\_n3A**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: VODAFONE Group Plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000741 Draft CR to TS 38.101-3: Adding DC\_7C-20A\_n3A**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: VODAFONE Group Plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000742 Draft CR to TS 38.101-3: Adding DC\_7C-20A\_n1A**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: VODAFONE Group Plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000766 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1-8\_n77, 1-11\_n77, 3-28\_n77 and 8-11\_n77**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000843 TP for TR 37.716-21-11: DC\_2-66\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000844 TP for TR 37.716-21-11: DC\_3C-8A\_n1A**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000874 TP for TR 37.716-21-11: DC\_1A-18A\_n3A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000876 TP for TR 37.716-21-11 DC\_1A-28A\_n3A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001045 TP to TR 37.716-21-11: CA\_3-20\_n7**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Nokia, Nokia, Shanghai Bell, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001049 TP for TR 37.716-21-11: DC\_1A-3A\_n8A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001050 TP for TR 37.716-21-11: DC\_1A-7A\_n8A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001051 TP for TR 37.716-21-11: DC\_1A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001052 TP for TR 37.716-21-11: DC\_3A-7A\_n8A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001053 TP for TR 37.716-21-11: DC\_3A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001054 TP for TR 37.716-21-11: DC\_7A-20A\_n8A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001055 updated TP for TR 37.716-21-11: add UL DC\_1\_n38 for DC\_1-20\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001056 TP for TR 37.716-21-11: DC\_1A-41A\_n41A\DC\_1A-41C\_n41A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001057 TP for TR 37.716-21-11: DC\_1A-(n)41AA\DC\_1A-(n)41CA**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001058 Updated TP for TR 37.716-21-11: DC\_7C-20A\_n1A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Huawei, HiSilicon, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001059 Draft CR for TS 38.101-3: adding UL configurations for DC\_3A-7C\_n78A/DC\_3C-7C\_n78A**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Huawei, HiSilicon, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001299 TP for 37.716-21-11 to introduce DC\_2-66\_n25**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001300 TP for 37.716-21-11 to introduce DC\_12-66\_n25**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001301 TP for 37.716-21-11 to introduce DC\_46-66\_n25**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001532 TP for TR 37.716-21-11 to include DC\_2-7\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_2-7\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001533 TP for TR 37.716-21-11 to include DC\_2-71\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_2-71\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001534 TP for TR 37.716-21-11 to include DC\_7-66\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_7-66\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001535 TP for TR 37.716-21-11 to include DC\_66-71\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_66-71\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001536 TP for TR 37.716-21-11 to include DC\_2-66\_n38**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_2-66\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001537 TP for TR 37.716-21-11 to include DC\_7-66\_n71**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Samsung, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_7-66\_n71

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001538 TP for TR 37.716-21-11 to include DC\_2-71\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_2-71\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001539 TP for TR 37.716-21-11 to include DC\_66-71\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_66-71\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001540 TP for TR 37.716-21-11 to include DC\_2-71\_n78**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_2-71\_n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001541 TP for TR 37.716-21-11 to include DC\_66-71\_n78**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_66-71\_n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001974 TP for TR 37 716-21-11 to include DC\_2A-48A\_n12A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_2A-48A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001975 TP for TR 37 716-21-11 to include DC\_2A-66A\_n12A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_2A-66A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001976 TP for TR 37 716-21-11 to include DC\_5A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular, MediaTek*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_5A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001977 TP for TR 37 716-21-11 to include DC\_12A-48A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_12A-48A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001978 TP for TR 37 716-21-11 to include DC\_12A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_12A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001979 TP for TR 37 716-21-11 to include DC\_48A-66A\_n12A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_48A-66A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001980 TP for TR 37 716-21-11 to include DC\_48A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, US Cellular, MediaTek*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_48A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002004 draft Rel-16 CR to 38.101-3 to add CA\_n7B UL for three band DC combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, Telstra*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add CA\_n7B UL for three band DC combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002007 TP for TR 37.716-21-11 to include DC\_7A-28A\_n3A, DC\_7C-28A\_n3A**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 37.716-21-11 to include DC\_7A-28A\_n3A, DC\_7C-28A\_n3A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002010 draft Rel-16 CR to 38.101-3 to add new configurations for 2-66\_n41 to existing combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, T-Mobile US*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add new configurations for 2-66\_n41 to existing combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002012 TP for TR 37 716-21-11 to include DC\_2-46\_n66**

*Type: pCR For: Approval  
 37.716-21-11 v0.8.0  
 Source: Ericsson, T-Mobile US, MediaTek*

**Abstract:**

TP for TR 37 716-21-11 to include DC\_2-46\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.4.3 EN-DC with FR2 band [DC\_R16\_2BLTE\_1BNR\_3DL2UL-Core]

**R4-2000253 TP for TR 37.716-21-11: DC\_2-5\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000254 TP for TR 37.716-21-11: DC\_2-5\_n261**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000255 TP for TR 37.716-21-11: DC\_2-13\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000256 TP for TR 37.716-21-11: DC\_2-13\_n261**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000257 TP for TR 37.716-21-11: DC\_2-66\_n260 and DC\_2-66-66\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000258 TP for TR 37.716-21-11: DC\_2-66\_n261 and DC\_2-66-66\_n261**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000259 TP for TR 37.716-21-11: DC\_5-66\_n260 and DC\_5-66-66\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000260 TP for TR 37.716-21-11: DC\_5-66\_n261 and DC\_5-66-66\_n261**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000261 TP for TR 37.716-21-11: DC\_13-66\_n260 and DC\_13-66-66\_n260**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000262 TP for TR 37.716-21-11: DC\_13-66\_n261 and DC\_13-66-66\_n261**

*Type: pCR For: Approval  
 37.716-21-11 v0.9.0  
 Source: Samsung, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.5 EN-DC of 3 LTE band and 1 NR band [DC\_R16\_3BLTE\_1BNR\_4DL2UL]

#### 9.5.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core/Perf]

**R4-2001500 Revised WID LTE 3DL and one NR band Rel-16**

*Type: WID revised For: Agreement  
 Source: Ericsson*

**Abstract:**

Revised WID LTE 3DL and one NR band Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001503 TR 37.716-31-11 v0.9.0 Rel-16 DC combinations LTE 3DL and one NR band**

*Type: draft TR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson*

**Abstract:**

TR 37.716-31-11 v0.9.0 Rel-16 DC combinations LTE 3DL and one NR band

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001507 TP for TR 37.716-31-11 for updated scope from RAN #86**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson*

**Abstract:**

TP for TR 37.716-31-11 for updated scope from RAN #86

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001512 CR introduction completed band combinations 37.716-31-11 -> 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0206 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 37.716-31-11 -> 38.101-3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.5.2 EN-DC without FR2 band [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core]

**R4-2000542 TP to TR 37.716-31-11: Addition of DC\_2A-5A\_(n)12AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000543 TP to TR 37.716-31-11: Addition of DC\_2A-5A-48A\_n12A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000544 TP to TR 37.716-31-11: Addition of DC\_ 2A-5A-66A\_n12A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000545 TP to TR 37.716-31-11: Addition of DC\_2A-12A\_(n)5AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000546 TP to TR 37.716-31-11: Addition of DC\_2A-12A-48A\_n5A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000547 TP to TR 37.716-31-11: Addition of DC\_2A-12A-66A\_n5A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000548 TP to TR 37.716-31-11: Addition of DC\_2A-48A\_(n)5AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000549 TP to TR 37.716-31-11: Addition of DC\_2A-48A-66A\_n5A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000550 TP to TR 37.716-31-11: Addition of DC\_2A-66A\_(n)5AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000551 TP to TR 37.716-31-11: Addition of DC\_5A-48A\_(n)12AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000552 TP to TR 37.716-31-11: Addition of DC\_5A-48A-66A\_n12A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000553 TP to TR 37.716-31-11: Addition of DC\_5A-66A\_(n)12AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000554 TP to TR 37.716-31-11: Addition of DC\_12A-48A\_(n)5AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000555 TP to TR 37.716-31-11: Addition of DC\_12A-48A-66A\_n5A**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000556 TP to TR 37.716-31-11: Addition of DC\_12A-66A\_(n)5AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000710 Draft CR to TS 38.101-3: Adding DC\_1A-7C-20A\_n3A**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: VODAFONE Group Plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000739 Draft CR to TS 38.101-3: Adding DC\_3A-7C-20A\_n1A**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: VODAFONE Group Plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000763 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1-8-11\_n77**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000845 TP for TR 37.716-31-11: DC\_3C-7A-8A\_n1A**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001289 TP for 37.716-31-11 to introduce DC\_2-5-66\_n2**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001290 TP for 37.716-31-11 to introduce DC\_2-5-66\_n5**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001291 TP for 37.716-31-11 to introduce DC\_2-5-66\_n66**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001292 TP for 37.716-31-11 to introduce DC\_2-13-66\_n2**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001293 TP for 37.716-31-11 to introduce DC\_2-13-66\_n5**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001294 TP for 37.716-31-11 to introduce DC\_2-13-66\_n48**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001295 TP for 37.716-31-11 to introduce DC\_2-13-66\_n66**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001296 TP for 37.716-31-11 to introduce DC\_2-46-48\_n5**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001297 TP for 37.716-31-11 to introduce DC\_2-46-48\_n66**

*Type: pCR For: Approval  
 37.716-31-11 v0.9.0  
 Source: Nokia, Verizon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001542 TP for TR 37 716-31-11 to include DC\_2-7-66\_n38**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2-7-66\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001543 TP for TR 37 716-31-11 to include DC\_2-66-71\_n38**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2-66-71\_n38

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001544 TP for TR 37 716-31-11 to include DC\_2-7-66\_n71**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2-7-66\_n71

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001545 TP for TR 37 716-31-11 to include DC\_2-66-71\_n66**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2-66-71\_n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001546 TP for TR 37 716-31-11 to include DC\_2-66-71\_n78**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, Rogers*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2-66-71\_n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001984 TP for TR 37 716-31-11 to include DC\_2A-48A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-48A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001985 TP for TR 37 716-31-11 to include DC\_12A-48A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_12A-48A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001986 TP for TR 37 716-31-11 to include DC\_2A-12A-48A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-12A-48A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001987 TP for TR 37 716-31-11 to include DC\_2A-12A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-12A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001988 TP for TR 37 716-31-11 to include DC\_5A-48A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_5A-48A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001989 TP for TR 37 716-31-11 to include DC\_2A-5A-48A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-5A-48A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001990 TP for TR 37 716-31-11 to include DC\_2A-5A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-5A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001991 TP for TR 37 716-31-11 to include DC\_5A-12A-48A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_5A-12A-48A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001992 TP for TR 37 716-31-11 to include DC\_5A-12A-66A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_5A-12A-66A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001993 TP for TR 37 716-31-11 to include DC\_2A\_5A-12A\_n71A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A\_5A-12A\_n71A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001994 TP for TR 37 716-31-11 to include DC\_2A-48A-66A\_n12A**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-48A-66A\_n12A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001995 TP for TR 37 716-31-11 to include DC\_48A-66A-(n)12AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_48A-66A-(n)12AA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001996 TP for TR 37 716-31-11 to include DC\_2A-48A-(n)12AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-48A-(n)12AA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001997 TP for TR 37 716-31-11 to include DC\_2A-66A-(n)12AA**

*Type: pCR For: Approval  
 37.716-31-11 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37 716-31-11 to include DC\_2A-66A-(n)12AA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002005 draft Rel-16 CR to 38.101-3 to add CA\_n7B UL for four band DC combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, Telstra*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add CA\_n7B UL for four band DC combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.5.3 EN-DC with FR2 band [DC\_R16\_3BLTE\_1BNR\_4DL2UL-Core]

### 9.6 EN-DC of 4 LTE band and 1 NR band [DC\_R16\_4BLTE\_1BNR\_5DL2UL]

#### 9.6.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core/Perf]

**R4-2001284 Revised WID on Dual Connectivity (EN-DC) of 4 bands LTE inter-band CA (4DL/1UL) and 1 NR band (1DL/1UL)**

*Type: WID revised For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001285 CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0200 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001286 draftTR 37.716-41-11 v0.7.0**

*Type: draft TR For: Approval  
 37.716-41-11 v0.7.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.6.2 EN-DC without FR2 band [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core]

#### 9.6.3 EN-DC with FR2 band [DC\_R16\_4BLTE\_1BNR\_5DL2UL-Core]

**R4-2000877 draft CR for correction DC of LTE 4bands + NR 1band (FR2) for TS 38.101-3**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.7 EN-DC of x bands (x=1,2, 3, 4) LTE inter-band CA and 2 bands NR inter-band CA [DC\_R16\_xBLTE\_2BNR\_yDL2UL]

#### 9.7.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core/Per]

**R4-2001042 TR 37.716-21-21 v0.9.0 update: LTE(xDL/1UL)+ NR(2DL/1UL) DC in rel-16**

*Type: draft TR For: Approval  
 37.716-21-21 v0.9.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001064 Revised WID on LTE (xDL/UL x=1.2,3,4) with NR 2 bands (2DL/1UL) EN DC in rel-16**

*Type: WID revised For: Agreement  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001066 Introducing CR on new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in rel-16**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0196 Cat: B (Rel-16)  
  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.7.2 EN-DC including NR inter CA without FR2 band [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core]

**R4-2000102 TP for TR 37.716-21-21: DC\_66\_n5-n48**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000103 TP for TR 37.716-21-21: DC\_13\_n48-n66**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000105 TP for TR 37.716-21-21: DC\_13\_n5-n48**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000106 TP for TR 37.716-21-21: DC\_13-66\_n5-n48**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000182 Draft CR: Adding EN-DC configurations to DC\_3-20\_n28-n78**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Nokia, Nokia Shanghai Bell, BT plc*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000263 TP for TR 37.716-21-21: DC\_2A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000264 TP for TR 37.716-21-21: DC\_2A-7A\_n66A-n78A and DC\_2A-7A-7A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000265 TP for TR 37.716-21-21: DC\_2A-7A-66A\_n66A-n78A and DC\_2A-7A-7A-66A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000266 TP for TR 37.716-21-21: DC\_2A-66A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000267 TP for TR 37.716-21-21: DC\_7A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000268 TP for TR 37.716-21-21: DC\_7A-7A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000269 TP for TR 37.716-21-21: DC\_7A-66A\_n66A-n78A and DC\_7A-7A-66A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000270 TP for TR 37.716-21-21: DC\_66A\_n66A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Samsung, Bell mobility*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000480 TP for TR37.716-21-21: DC\_1A-3A-20A\_n38A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000481 TP for TR37.716-21-21\_ DC\_1A-20A\_n3A-n38A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000482 TP for TR37.716-21-21\_ DC\_1A-20A\_n3A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000483 TP for TR37.716-21-21\_ DC\_1A-20A-38A\_n3A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000484 TP for TR37.716-21-21: DC\_3A-20A\_n38A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000485 TP for TR37.716-21-21: DC\_7A-20A\_n3A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000846 TP for TR 37.716-21-21:DC\_2\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000851 TP for TR 37.716-21-21: UE requirements for DC\_3-3-7-8\_n1-n78, DC\_3-7-7-8\_n1-n78, DC\_3-3-7-7-8\_n1-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000856 TP for TR 37.716-21-21: UE requirements for DC\_3-3-8\_n1-n78, DC\_7-7-8\_n1-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001092 TP to TR 37.716.21-21: Addition of CA configuration for DC\_1A\_n8A-n78A**

*Type: other For: Agreement  
 Source: Huawei Technologies R&D UK*

**Abstract:**

This paper proposes the addition of DC\_1A\_n8A-n78A.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001128 TP on summary of self-interference analysis for new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in rel-16**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001130 MSD results for new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in rel-16**

*Type: pCR For: Approval  
 37.716-21-21 v0.9.0  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001998 TP for TR 37.716-21-21 to include DC\_28\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_28\_n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001999 TP for TR 37.716-21-21 to include DC\_3-28\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_3-28\_n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002000 TP for TR 37.716-21-21 to include DC\_1-28\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_1-28\_n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002001 TP for TR 37.716-21-21 to include DC\_1-3-28\_n7-n78**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_1-3-28\_n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002002 draft CR adding configurations for 1\_n7-n78, 3\_n7-n78, 1-3\_n7-n78, 3\_n7-n78**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, Telstra*

**Abstract:**

draft CR adding configurations for 1\_n7-n78, 3\_n7-n78, 1-3\_n7-n78, 3\_n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002008 TP for TR 37.716-21-21 to include DC\_7A-28A\_n3A-n78A, DC\_7C-28A\_n3A-n78A**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, Telstra*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_7A-28A\_n3A-n78A, DC\_7C-28A\_n3A-n78A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002011 draft Rel-16 CR to 38.101-3 to add new configurations for 2\_n41-n71, 66\_n25-n41, 66\_n41-n71, 2-66\_n41-n71 to existing combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson, T-Mobile US*

**Abstract:**

draft Rel-16 CR to 38.101-3 to add new configurations for 2\_n41-n71, 66\_n25-n41, 66\_n41-n71, 2-66\_n41-n71 to existing combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002013 TP for TR 37.716-21-21 to include DC\_2\_n41-n66**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, T-Mobile US*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2\_n41-n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002014 TP for TR 37.716-21-21 to include DC\_2\_n66-n71**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, T-Mobile US*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2\_n66-n71

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002016 TP for TR 37.716-21-21 to include 66\_n25-n71**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, T-Mobile US*

**Abstract:**

TP for TR 37.716-21-21 to include 66\_n25-n71

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002017 TP for TR 37.716-21-21 to include DC\_2-46\_n41-n66**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, T-Mobile US*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2-46\_n41-n66

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002018 TP for TR 37.716-21-21 to include DC\_2-66\_n71-n261**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, T-Mobile US*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2-66\_n71-n261

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.7.3 EN-DC including NR inter CA with FR2 band [DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core]

**R4-2000537 TP for TR 37.716-21-21: DC\_66A\_n12A-n258A**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000538 TP for TR 37.716-21-21: DC\_66A\_n12A-n260A**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000539 TP for TR 37.716-21-21: DC\_66A\_n12A-n261A**

*Type: pCR For: Approval  
 37.716-11-11 v0.1.0  
 Source: Nokia, US Cellular*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000762 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1-8\_n77-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000765 Draft CR for TS 38.101-3: Support of n77(2A) in DC\_1\_n77-n257, 3\_n77-n257 and 8\_n77-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000776 TP for TR 37.716-21-21: EN-DC\_11\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000777 TP for TR 37.716-21-21: EN-DC\_28\_n77-n257**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000860 TP for EN-DC of 1-3-21\_n78-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000861 TP for EN-DC of 1-19-42\_n78-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000862 TP for EN-DC of 1-21-42\_n78-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000863 TP for EN-DC of 19-21-42\_n78-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000864 TP for EN-DC of 1-3-21\_n79-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000865 TP for EN-DC of 1-19-42\_n79-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000866 TP for EN-DC of 1-21-42\_n79-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000867 TP for EN-DC of 19-21-42\_n79-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000868 TP for EN-DC of 1-3-21\_n77-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000869 TP for EN-DC of 1-19-42\_n77-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000870 TP for EN-DC of 1-21-42\_n77-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000871 TP for EN-DC of 19-21-42\_n77-n257 for TR37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000879 draft CR for introduce DC of LTE 2bands + NR 2band for TS 38.101-3**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000880 draft CR for introduce DC of LTE 3bands + NR 2band for TS 38.101-3**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000882 draft CR for introduce DC of LTE 4bands + NR 2band for TS 38.101-3**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: KDDI Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000888 CR to TS38.101-3 on band combination for Inter-band EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0191 Cat: F (Rel-16)  
  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001093 draft CR for EN-DC inc NR CA FR1+FR2 w xDL\_2ULfor TS 38.101-3**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001094 TP for DC\_1-19\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001095 TP for DC\_1-19\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001096 TP for DC\_1-19\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001097 TP for DC\_1-21\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001098 TP for DC\_1-21\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001099 TP for DC\_1-21\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001100 TP for DC\_1-3\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001101 TP for DC\_1-42\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001102 TP for DC\_1-42\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001103 TP for DC\_19-21\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001104 TP for DC\_19-21\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001105 TP for DC\_19-21\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001106 TP for DC\_19-42\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001107 TP for DC\_19-42\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001108 TP for DC\_19-42\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001109 TP for DC\_21-42\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001110 TP for DC\_21-42\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001111 TP for DC\_21-42\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001112 TP for DC\_3-19\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001113 TP for DC\_3-19\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001114 TP for DC\_3-19\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001115 TP for DC\_3-21\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001116 TP for DC\_3-21\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001117 TP for DC\_3-21\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001118 TP for DC\_3-42\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001119 TP for DC\_3-42\_n78-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001120 TP for DC\_3-42\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001121 TP for DC\_42\_n77-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001122 TP for DC\_42\_n79-n257 for TR 37.716-21-21**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001981 TP for TR 37.716-21-21 to include DC\_2A\_n12A-n258A**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2A\_n12A-n258A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001982 TP for TR 37.716-21-21 to include DC\_2A\_n12A-n260A**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2A\_n12A-n260A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001983 TP for TR 37.716-21-21 to include DC\_2A\_n12A-n261A**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, US Cellular*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2A\_n12A-n261A

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002015 TP for TR 37.716-21-21 to include DC\_2\_n71-n261**

*Type: pCR For: Approval  
 37.716-21-21 v0.8.0  
 Source: Ericsson, T-Mobile US*

**Abstract:**

TP for TR 37.716-21-21 to include DC\_2\_n71-n261

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.8 Band combinations for SA NR supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP) [NR\_SUL\_combos\_R16]

#### 9.8.1 Rapporteur Input (WID/TR/CR) [NR\_SUL\_combos\_R16-Core/Per]

**R4-2001067 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: Agreement  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.8.2 UE RF [NR\_SUL\_combos\_R16-Core]

**R4-2001302 TP for 37.716-21-21 to introduce DC\_2-46\_n41-n71**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001303 TP for 37.716-21-21 to introduce DC\_2-46-66\_n41-n71**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001304 TP for 37.716-21-21 to introduce DC\_46-66\_n25-n41**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001305 TP for 37.716-21-21 to introduce DC\_46-66\_n41-n71**

*Type: pCR For: Approval  
 37.716-21-21 v0.7.0  
 Source: Nokia, T-Mobile US*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002026 UL Configuration for ULSUP TDM combinations**

*Type: other For: Discussion  
 38.101-3 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

In this contribution, we have looked at some potential clarification needed in TDM for SUL UL configurations to avoid LTE de-sense for ULSUP TDM combinations the corresponding LTE DL band.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002071 CR to 38.101-3 on EN-DC band combination with SUL for n41**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0215 Cat: F (Rel-16)  
  
 Source: Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.9 NR Inter-band Carrier Aggregation for 3 bands DL with 1 band UL [NR\_CA\_R16\_3BDL\_1BUL]

#### 9.9.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_3BDL\_1BUL-Core/Per]

**R4-2000624 TR 38.716-03-01 v 0.2.0**

*Type: draft TR For: Approval  
 38.716-03-01 v0.5.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000625 Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0234 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000626 Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0185 Cat: B (Rel-16)  
  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000627 Revised WID: Rel-16 NR inter-band CA for 3 bands DL with 1 band UL**

*Type: WID revised For: Agreement  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.9.2 UE RF [NR\_CA\_R16\_3BDL\_1BUL-Core]

**R4-2000144 TP for TR38.716-03-01: Requirements for CA\_n29A-n66A-n70A, CA\_n29A-n66B-n70A, and CA\_n29A-n66(2A)-n70A**

*Type: pCR For: Approval  
 38.716-03-01 v0.3.0  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000185 TP to TR 38.716-03-01: CA\_n25-n41-n71**

*Type: pCR For: Approval  
 38.716-03-01 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell, T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000186 TP to TR 38.716-03-01: CA\_n41-n66-n71**

*Type: pCR For: Approval  
 38.716-03-01 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell, T-Mobile USA*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000420 CR for 38.101-1: Removal of inter-band CA redundancies**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0213 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000487 CR to TS 38.101-1: Improvement on NR 3DL inter-band CA combination**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0219 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000760 Draft CR for TS 38.101-1: Support of n77(2A) in CA\_n3-n28-n77**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000847 TP for TR 38.716-03-01:CA\_n25-n66-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.5.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000848 TP for TR 38.716-03-01: CA\_n7-n66-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.5.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000849 TP for TR 38.716-03-01: CA\_n5-n66-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.5.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000850 TP for TR 38.716-03-01: CA\_n7-n25-n66**

*Type: pCR For: Approval  
 38.716-03-01 v0.5.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001063 TP for TR 38.716-03-01: CA\_n20A-n28A-n78A\_BCS0**

*Type: pCR For: Approval  
 38.716-03-01 v0.3.0  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001520 TP for TR 38.716-03-01 to include CA\_n1-n7-n28**

*Type: pCR For: Approval  
 38.716-03-01 v0.8.0  
 Source: Ericsson, BT plc*

**Abstract:**

TP for TR 38.716-03-01 to include CA\_n1-n7-n28

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001521 TP for TR 38.716-03-01 to include CA\_n1-n7-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.8.0  
 Source: Ericsson, BT plc*

**Abstract:**

TP for TR 38.716-03-01 to include CA\_n1-n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.10 NR Inter-band Carrier Aggregation for 4 bands DL with 1 band UL [NR\_CA\_R16\_4BDL\_1BUL]

#### 9.10.1 Rapporteur Input (WID/TR/CR) [NR\_CA\_R16\_4BDL\_1BUL-Core/Per]

**R4-2001501 Revised WID 4 bands NR CA Rel-16**

*Type: WID revised For: Agreement  
 Source: Ericsson*

**Abstract:**

Revised WID 4 bands NR CA Rel-16

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001504 TR 38.716-04-01 v0.2.0 Rel-16 NR Inter-band 4 bands CA**

*Type: draft TR For: Approval  
 38.716-04-01 v0.1.0  
 Source: Ericsson*

**Abstract:**

TR 38.716-04-01 v0.2.0 Rel-16 NR Inter-band 4 bands CA

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001508 TP for TR 38.716-04-01 for updated scope from RAN #86**

*Type: pCR For: Approval  
 38.716-04-01 v0.1.0  
 Source: Ericsson*

**Abstract:**

TP for TR 38.716-04-01 for updated scope from RAN #86

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001513 CR introduction completed band combinations 38.716-04-01 -> 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0259 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-04-01 -> 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001514 CR introduction completed band combinations 38.716-04-01 -> 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0207 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR introduction completed band combinations 38.716-04-01 -> 38.101-3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.10.2 UE RF [NR\_CA\_R16\_4BDL\_1BUL-Core]

**R4-2000761 Draft CR for TS 38.101-3: Support of n77(2A) in CA\_n3-n28-n77-n257**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.11 NR Inter-band Carrier Aggregation/Dual connectivity for 3 bands DL with 2 bands UL [NR\_CADC\_R16\_3BDL\_2BUL]

#### 9.11.1 Rapporteur Input (WID/TR/CR) [NR\_CADC\_R16\_3BDL\_2BUL-Core/Per]

**R4-2000499 CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0223 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000500 CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0179 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000503 Revised WID on Rel-16 NR Inter-band Carrier Aggregation/Dual Connectivity for 3 bands DL with 2 bands UL**

*Type: WID revised For: Agreement  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000804 TR 38.716-03-02 v040**

*Type: draft TR For: Approval  
 38.716-03-02 v0.4.0  
 Source: ZTE Wistron Telecom AB*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.11.2 UE RF [NR\_CADC\_R16\_3BDL\_2BUL-Core]

**R4-2000145 TP for TR38.716-03-02: UL CA Requirements for CA\_n66A-n70A-n71A, CA\_n66B-n70A-n71A, and CA\_n66(2A)-n70A-n71A**

*Type: pCR For: Approval  
 38.716-03-02 v0.3.0  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000415 CR for 38.101-3: Remove delta Tib and delta Rib for FR1+FR2 CA**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0165 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000475 TP for TR38.716-03-02: updated the MSD value for CA\_n3-n40A-n41A**

*Type: pCR For: Approval  
 38.716-03-02 v0.4.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000476 TP for TR38.716-03-02: updated the MSD value for CA\_n40A-n41A-n79A**

*Type: pCR For: Approval  
 38.716-03-02 v0.4.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000778 TP for TR 38.716-03-02: CA\_n3-n28-n77**

*Type: pCR For: Approval  
 38.716-03-02 v0.3.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000779 TP for TR 38.716-03-02: CA\_n3-n28-n257**

*Type: pCR For: Approval  
 38.716-03-02 v0.3.0  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001522 TP for TR 38.716-03-02 to include CA\_n1-n7-n28**

*Type: pCR For: Approval  
 38.716-03-01 v0.8.0  
 Source: Ericsson, BT plc*

**Abstract:**

TP for TR 38.716-03-02 to include CA\_n1-n7-n28

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001523 TP for TR 38.716-03-02 to include CA\_n1-n7-n78**

*Type: pCR For: Approval  
 38.716-03-01 v0.8.0  
 Source: Ericsson, BT plc*

**Abstract:**

TP for TR 38.716-03-02 to include CA\_n1-n7-n78

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002159 CR for 38.101-3: delta Tib corrections**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0279 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2002161 CR for 38.101-1: delta Tib corrections**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0280 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.12 Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL [DC\_R16\_LTE\_NR\_3DL3UL]

#### 9.12.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_LTE\_NR\_3DL3UL-Core/Per]

**R4-2000501 CR to reflect the completed ENDC combinations for 3 bands DL with 3 bands UL into Rel16 TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0180 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000504 Revised WID: Dual Connectivity (EN-DC) with 3 bands DL and 3 bands UL**

*Type: WID revised For: Agreement  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.12.2 UE RF [DC\_R16\_LTE\_NR\_3DL3UL-Core]

**R4-2000477 TP for TR 37.716-33: DC\_3A\_n79A-n258**

*Type: pCR For: Approval  
 37.716-33 v0.1.0  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000558 Correction to remedy missing implementation of approved CR0093r1**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0181 Cat: F (Rel-16)  
  
 Source: ETSI MCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001123 draft CR for EN-DC inc NR CA FR1+FR2 w 3DL\_3ULfor TS 38.101-3**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001124 TP for DC\_21\_n77-n257 for TR 37.716-33**

*Type: pCR For: Approval  
 37.716-33 v0.1.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001125 TP for DC\_21\_n78-n257 for TR 37.716-33**

*Type: pCR For: Approval  
 37.716-33 v0.1.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001126 TP for DC\_21\_n79-n257 for TR 37.716-33**

*Type: pCR For: Approval  
 37.716-33 v0.1.0  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.13 Dual Connectivity (EN-DC) of LTE inter-band CA xDL/1UL bands (x=2,3,4) and NR FR1 1DL/1UL band and NR FR2 1DL/1UL band [DC\_R16\_xBLTE\_2BNR\_yDL3UL]

#### 9.13.1 Rapporteur Input (WID/TR/CR) [DC\_R16\_xBLTE\_2BNR\_yDL3UL-Core/Per]

**R4-2000755 draft TR skeleton TR 37.716-41-22 v0.0.1**

*Type: draft TR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002105 Revised WID for Dual Connectivity (EN-DC) of LTE inter-band CA xDL/1UL bands (x=2,3,4) and NR FR1 1DL/1UL band and NR FR2 1DL/1UL band**

*Type: WID revised For: Agreement  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002106 Updated TR 37.716-41-22 v0.1.0**

*Type: draft TR For: Approval  
 37.716-41-22 v0.1.0  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002107 CR for introduce new EN-DC of LTE 2,3,4 band + NR FR1 1UL/1DL band + NR FR2 1UL/1DL band for TS 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0218 Cat: B (Rel-16)  
  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.13.2 UE RF [DC\_R16\_xBLTE\_2BNR\_yDL3UL-Core]

**R4-2001131 TP for DC\_1-3\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001132 TP for DC\_1-21\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001133 TP for DC\_1-42\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001134 TP for DC\_3-19\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001135 TP for DC\_3-21\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001136 TP for DC\_3-42\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001137 TP for DC\_19-21\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001138 TP for DC\_19-42\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001139 TP for DC\_21-42\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001140 TP for DC\_1-3\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001141 TP for DC\_1-21\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001142 TP for DC\_1-42\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001143 TP for DC\_3-19\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001144 TP for DC\_3-21\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001145 TP for DC\_3-42\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001146 TP for DC\_19-21\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001147 TP for DC\_19-42\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001148 TP for DC\_21-42\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001149 TP for DC\_1-3\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001150 TP for DC\_1-21\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001151 TP for DC\_1-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001152 TP for DC\_3-19\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001153 TP for DC\_3-21\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001154 TP for DC\_3-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001155 TP for DC\_19-21\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001156 TP for DC\_19-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001157 TP for DC\_21-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001158 TP for DC\_1-19\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001159 TP for DC\_1-3-21\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001160 TP for DC\_19-21-42\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001161 TP for DC\_1-21-42\_n77-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001162 TP for DC\_1-3-21\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001163 TP for DC\_19-21-42\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001164 TP for DC\_1-21-42\_n78-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001165 TP for DC\_1-3-21\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001166 TP for DC\_19-21-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001167 TP for DC\_1-21-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001168 TP for DC\_1-19-42\_n79-n257 for TR37.716-41-22**

*Type: pCR For: Approval  
 37.716-41-22 v0.0.1  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.14 29dBm UE Power Class for B41 and n41 [LTE\_NR\_B41\_Bn41\_PC29dBm]

#### 9.14.1 Rapporteur Input (WID/TR/CR) [LTE\_NR\_B41\_Bn41\_PC29dBm]

#### 9.14.2 UE RF (36.101, 38.101-1, 38.101-3) [LTE\_NR\_B41\_Bn41\_PC29dBm]

**R4-2000007 A-MPR Proposal for B41/n41 EN-DC**

*Type: other For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000111 Discussion on TX diversity enabling 29 dBm power class**

*Type: other For: (not specified)  
 Source: Qualcomm Incorporated*

**Abstract:**

How to enable TX diversity now that it is part of the WI.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000112 Draft CR to enable tx diversity for 29 dBm power class**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Qualcomm Incorporated*

**Abstract:**

Draft CR for discussion on how th changes for TX diversity for 29 dBm power class could be incorporated in the TS 38.101-1

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000423 CR for 38.101-3: Allocation aware MPR for intra-band EN-DC**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0167 Cat: C (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000424 New SIB parameter to allow 29 dBm operation for LTE**

*Type: other For: Approval  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000425 Applying the PC2 A-MPR requirements to PC1.5**

*Type: other For: Approval  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000426 29 dBm HPUE Power Class logic**

*Type: other For: Approval  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000427 CR for 36.101: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5594 Cat: B (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000428 CR for 36.307: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 36.307 v16.1.0 CR-4440 Cat: B (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000429 CR for 38.101-1: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0214 Cat: B (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000430 CR for 38.101-3: Introduction of Power Class 1.5**

*Type: CR For: Agreement  
 38.101-3 v16.2.0 CR-0168 Cat: B (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000431 CR for 38.307: Introduction of power class 1.5**

*Type: CR For: Agreement  
 38.307 v16.1.0 CR-0015 Cat: B (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000905 Proposal on 29dBm P-Max issue for NR and LTE**

*Type: other For: Approval  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001239 New A-MPR curves for 29dBm HPUE B41/n41 EN-DC**

*Type: other For: Approval  
 Source: LG Electronics Finland*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001547 [29dBm] EVM Impact of Reverse IMD3 on UL MIMO Modulation Order Capability**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Abstract:**

One aspect that has not been properly assessed yet is the potential impact of Reverse IMD3 on EVM and the related support of higher order modulations in UL MIMO or TX diversity operation, This paper provides a preliminary study of the issue.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002138 Draft CR for 38.101-1: Introduction of Power Class 1.5**

*Type: draftCR For: Endorsement  
 38.101-1 v16.2.0  
 Source: Sprint Corporation*

**Abstract:**

Draft CR being provided for discussion only to generate feedback from interested parties. Comments welcome and appreciated.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002140 Draft CR for 38.101-3: Introduction of Power Class 1.5**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Sprint Corporation*

**Abstract:**

Draft CR being provided for discussion. Feedback welcome and appreciated.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.14.3 Others [LTE\_NR\_B41\_Bn41\_PC29dBm]

### 9.15 Power Class 2 UE for EN-DC (1 LTE FDD band +1 NR TDD band) [ENDC\_UE\_PC2\_FDD\_TDD-Core]

#### 9.15.1 General [ENDC\_UE\_PC2\_FDD\_TDD-Core]

**R4-2000316 Discussion on power class 2 UE for EN-DC FDD-TDD**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000878 Discussion on configurations for FDD-TDD EN-DC High Power UE**

*Type: other For: Approval  
 Source: CHTTL*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001037 Consideration on SAR compliance schemes for PC2 FDD+TDD HPUE**

*Type: other For: Approval  
 Source: China Unicom*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.15.2 UE RF requirement [ENDC\_UE\_PC2\_FDD\_TDD-Core]

**R4-2000447 MSD analysis on high power UE for DC\_3-n78**

*Type: other For: Approval  
 Source: Xiaomi*

**Abstract:**

In this paper, we give the initial analysis on the Rx desense requirements for DC\_3-n78 due to high power UE.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000908 CR for adding power class 2 output power requirement for DC\_3A\_n41A**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0194 Cat: A (Rel-16)  
  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001188 MSD test results for Power Class 2 UE for EN-DC (1 LTE FDD band +1 NR TDD band)**

*Type: other For: Approval  
 Source: LG Electronics France*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001326 Specification of EN-DC Power Class 2 for FDD-TDD band combinations**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we propose a specification framework for EN-DC power class 2 for FDD-TDD combination based on both duty-cycle indication and reducing the FDD power

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001327 Introduction of EN-DC power class 2 for FDD-TDD band combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson*

**Abstract:**

Draft CR to introduce requirements for EN-DC power class 2 for FDD-TDD band combinations

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2002097 Power class and configured power for PC2 FDD-TDD EN-DC**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002101 Introduction of EN-DC power class 2 for FDD-TDD band combinations**

*Type: draftCR For: Endorsement  
 38.101-3 v16.2.1  
 Source: Ericsson*

**Abstract:**

Draft CR to introduce requirements for EN-DC power class 2 for FDD-TDD band combinations

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.15.3 Signaling [ENDC\_UE\_PC2\_FDD\_TDD-Core]

**R4-2000121 on UE capability reporting for EN-DC (FDD+TDD) HPUE**

*Type: other For: Approval  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000122 Draft LS on UE capability for PC2 inter-band EN-DC (LTE FDD+NR TDD)**

*Type: LS out For: Approval  
 to RAN2  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000968 Discussion on HPUE for TDD+FDD**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.16 Introduction of NR band n259 [NR\_n259]

**R4-2001961 TP to TR 38.887 on General issues**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on general issues

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001968 TR 38.88:7: Introduction of band n259**

*Type: draft TR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

TR 38.88:7: Introduction of band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.16.1 UE RF (38.101-2) [NR\_n259-Core]

**R4-2000023 Band n259 multi-band framework**

*Type: other For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000233 EESS protection from n259**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Abstract:**

ITU WRC-19 concluded that in order to protect the EESS (passive) in the frequency band 36-37 GHz the unwanted emissions of IMT stations operating in the frequency band 37-40.5 GHz shall meet -43 dB(W/MHz) and -23 dB(W/GHz).

This contribution discusses how

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000797 n259 associated multi-band relaxation**

*Type: other For: Approval  
 Source: MediaTek Beijing Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001957 Multiband relaxation for band n259**

*Type: other For: Approval  
 Source: Ericsson, Sony*

**Abstract:**

In this paper we propose new MBR framework for band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001962 TP to TR 38.887 on multiband relaxation**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on multiband relaxation

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001964 CR to 38.101-2 for Introduction of band n259**

*Type: CR For: Agreement  
 38.101-2 v16.2.0 CR-0131 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002034 Multi-band relaxation for n259**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.16.2 BS RF (38.104) [NR\_n259-Core]

**R4-2001192 Additional unwanted emission requirements for the EESS protection from Band n259**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001960 TP to TR 38.887 on BS RF requirements**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on BS RF requirements

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001965 CR to 38.141-2 for Introduction of band n259**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0141 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001966 CR to 38.104 for Introduction of band n259**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0161 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.16.3 RRM (38.133) [NR\_n259-Core]

**R4-2001956 RRM requirements for introducy´tion of band n259**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper we propose RRM requirements for band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001963 TP to TR 38.887 on RRM**

*Type: pCR For: Approval  
 38.887 v0.3.0  
 Source: Ericsson*

**Abstract:**

Text proposal to TR 38.887 on RRM

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001967 CR to 38.133 for Introduction of band n259**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0571 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to introduce band n259

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.16.4 Others [NR\_n259-Core/Perf]

**R4-2001193 BS conformance requirements for Band n259**

*Type: other For: Approval  
 Source: NTT DOCOMO, INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.17 Adding 30MHz channel bandwidth for NR band n1 [NR\_n1\_BW]

#### 9.17.1 UE RF (38.101-1) [NR\_n1\_BW-Core]

**R4-2000825 A-MPR simulation results for n1 30 MHz/40 MHz**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001203 CR to 38.101-1 Band n1 - wider CBW - Additional Channel BW**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0250 Cat: B (Rel-16)  
  
 Source: Ericsson, Huawei, China Unicom*

**Abstract:**

This CR is adding channel BW to band n1

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.17.2 BS RF (38.104) [NR\_n1\_BW-Core]

**R4-2001204 CR to 38.104 Band n1 - wider CBW - Additional Channel BW**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0146 Cat: B (Rel-16)  
  
 Source: Ericsson, Huawei, China Unicom*

**Abstract:**

This CR is adding channel BW to band n1

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.17.3 RRM (38.133) [NR\_n1\_BW]

#### 9.17.4 Others [NR\_n1\_BW]

### 9.18 Addition of wider channel bandwidth in NR band n28 [NR\_n28\_BW-Core]

**R4-2000165 TR 38.888 v0.1.0 Adding wider channel bandwidths in NR band n28**

*Type: draft TR For: Approval  
 38.888 v0.1.0  
 Source: CBN*

**Abstract:**

A new WI was approved during RAN#85 meeting, aiming to add wider channel bandwidth in NR band n28. Internal TR 38.888 will be outputed from this WI.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.18.1 UE RF (38.101-1) [NR\_n28\_BW-Core]

**R4-2000090 n28 AMPR for 30MHz BW**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000493 On UE REFSEN for 30MHz in band n28**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000621 UE co-existence reuiqrements for band n28 into 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0233 Cat: B (Rel-16)  
  
 Source: CATT, CBN, ZTE, Huawei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001086 CR for 38.101-1: introduce UE RF requirements for adding wider channel bandwidth in band n28**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0249 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001087 TP on UE RF REFSENS for adding wider channel bandwidth in band n28**

*Type: pCR For: Approval  
 38.888 v0.0.1  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001088 TP on UE Tx RF requirements for adding wider channel bandwidth in band n28**

*Type: pCR For: Approval  
 38.888 v0.0.1  
 Source: Huawei, HiSilicon, CBN*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001089 Updated 30MHz AMPR simulation results for NS\_18 in band n28**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001226 n28 supporting 30MHz REFSENS evaluation**

*Type: other For: Approval  
 38.101-1 v..  
 Source: MediaTek Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.18.2 BS RF (38.104) [NR\_n28\_BW-Core]

**R4-2000623 Introducing new channel bandwidth for band n28**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0131 Cat: B (Rel-16)  
  
 Source: CATT, CBN, ZTE, Huawei*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.18.3 RRM (38.133) [NR\_n28\_BW-Core]

#### 9.18.4 Others [NR\_n28\_BW-Core/Perf]

**R4-2000620 Introducing new channel bandwidth for band n28**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5595 Cat: B (Rel-16)  
  
 Source: CATT, CBN, ZTE, Huawei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000622 UE co-existence reuiqrements for band n28 into 38.101-3**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0184 Cat: B (Rel-16)  
  
 Source: CATT, CBN, ZTE, Huawei*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001170 Remove band 39 from protected band list of DC\_1-n28**

*Type: pCR For: Approval  
 38.888 v0.1.0  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.19 Introduction of NR Band n26 [NR\_n26]

#### 9.19.1 UE RF (38.101-1) [NR\_n26]

**R4-2000008 A-MPR Proposal for n26**

*Type: other For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000092 n26 AMPR**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000432 CR for 38.101-1: Introduction of n26**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0215 Cat: B (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000527 n26 A-MPR simulation results**

*Type: other For: (not specified)  
 Source: Nokia*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002145 n26 PA Back-Off Measurements**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: Skyworks Solutions Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.19.2 BS RF (38.104) [NR\_n26]

**R4-2000332 Introduction of n26**

*Type: CR For: Agreement  
 36.104 v16.4.0 CR-4889 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000333 Introduction of n26**

*Type: CR For: Agreement  
 36.141 v16.4.0 CR-1247 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000334 Introduction of n26**

*Type: CR For: Agreement  
 37.104 v16.4.0 CR-0893 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000335 Introduction of n26**

*Type: CR For: Agreement  
 37.141 v16.4.0 CR-0918 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000336 Introduction of n26**

*Type: CR For: Agreement  
 37.105 v16.2.0 CR-0181 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000337 Introduction of n26**

*Type: CR For: Agreement  
 37.145-1 v16.2.0 CR-0208 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000338 Introduction of n26**

*Type: CR For: Agreement  
 37.145-2 v16.2.0 CR-0217 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000339 Introduction of n26**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0126 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000340 Introduction of n26**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0086 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000341 Introduction of n26**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0105 Cat: B (Rel-16)  
  
 Source: Nokia, Sprint*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.19.3 RRM (38.133) [NR\_n26]

**R4-2000506 n26 introduction to 38.133**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0440 Cat: B (Rel-16)  
  
 Source: Dish Network*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.19.4 Others [NR\_n26]

### 9.20 Adding 25MHz and 50MHz channel bandwidth in NR band n1 [NR\_n1\_BW2]

**R4-2000813 Draft CR 38.104 adding Band n1 50MHz channel bandwidth**

*Type: draftCR For: Endorsement  
 38.104 v16.2.0  
 Source: China Unicom*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.20.1 UE RF (38.101-1) [NR\_n1\_BW2-Core]

**R4-2000108 n1 AMPR for 50MHz Channel BW**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000494 On UE REFSEN for 50MHz of band n1**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000826 A-MPR simulation results for n1 25MHz**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000827 UE REFSENS for 50 MHz**

*Type: other For: Approval  
 Source: Huawei, HiSilicon, China Unicom*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.20.2 BS RF (38.104) [NR\_n1\_BW2-Core]

#### 9.20.3 RRM (38.133) [NR\_n1\_BW2-Core]

#### 9.20.4 Others [NR\_n1\_BW2-Core/Perf]

### 9.21 Addition of asymmetric channel bandwidth for NR band n66 [NR\_n66\_BW]

#### 9.21.1 UE RF (38.101-1) [NR\_n66\_BW]

**R4-2000689 Way forward on the n66 asymmetric channel bandwidth**

*Type: other For: Approval  
 Source: Verizon UK Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000828 Further discussion on the support of asymmetric channel bandwidth**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000829 CR for TS 38.101: adding wider channel bandwidths for n66**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0240 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001953 LS to RAN2 on addition of asymmetric channel bandwidth for band n66**

*Type: LS out For: Approval  
 to RAN2  
 Source: Huawei*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.21.2 BS RF (38.104) [NR\_n66\_BW]

**R4-2000830 CR for TS 38.104: adding wider channel bandwidths for n66**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0139 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.21.3 RRM (38.133) [NR\_n66\_BW]

#### 9.21.4 OtherS [NR\_n66\_BW]

### 9.22 Adding wider channel bandwidth to NR band n38 [NR\_n38\_BW2]

#### 9.22.1 UE RF (38.101-1) [NR\_n38\_BW2]

**R4-2001208 CR to 38.101-1 Band n38 - wider CBW - Additional Channel BW**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0252 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR is adding channel BW to band n38

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.22.2 BS RF (38.104) [NR\_n38\_BW2]

**R4-2001209 CR to 38.104 Band n38 - wider CBW - Additional Channel BW**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0148 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR is adding channel BW to band n38

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.22.3 RRM (38.133) [NR\_n38\_BW2]

#### 9.22.4 Others [NR\_n38\_BW2]

### 9.23 LTE/NR spectrum sharing in band 48/n48 frequency range [NR\_n48\_LTE\_48\_coex-Core]

#### 9.23.1 General (such as work plan, AH minutes) [NR\_n48\_LTE\_48\_coex-Core]

**R4-2000085 Work plan for LTE/NR spectrum sharing in band 48/n48 frequency range**

*Type: Work Plan For: Approval  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.23.2 Channel raster, sync raster, and UL shift [NR\_n48\_LTE\_48\_coex-Core]

**R4-2000086 LTE/NR spectrum sharing in band 48/n48 frequency range**

*Type: other For: Decision  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000087 Introduction of LTE/NR spectrum sharing in band 48/n48 frequency range**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0185 Cat: B (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000095 Introduction of LTE/NR spectrum sharing in band 48/n48 frequency range**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0125 Cat: B (Rel-16)  
  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000273 DSS in LTE/NR band 48/n48**

*Type: other For: Discussion  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001043 Views on band 48/n48 spectrum sharing**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001386 LTE/NR spectrum sharing in band 48/n48**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Paper for approval.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002048 Views on dynamic spectrum sharing between LTE band 48 and NR band n48**

*Type: other For: Approval  
 Source: Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002068 CR to TS 38.104 on n48 dynamic spectrum sharing**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0162 Cat: B (Rel-16)  
  
 Source: Google Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 9.24 Adding 40 MHz channel bandwidth (15, 30 and 60kHz SCS) in NR band n3 [NR\_n3\_BW]

#### 9.24.1 UE RF (38.101-1) [NR\_n3\_BW]

**R4-2000088 n3 REFSENS**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001205 Band n3 - 40 MHz CBW – UE RF requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Thsi contribution discusses the needed changes when adding 40 MHz CBW to band n3

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001206 CR to 38.101-1 Band n3 - wider CBW - Additional Channel BW**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0251 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR is adding channel BW to band n3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.24.2 BS RF (38.104) [NR\_n3\_BW]

**R4-2001207 CR to 38.104 Band n3 - wider CBW - Additional Channel BW**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0147 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

This CR is adding channel BW to band n3

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.24.3 RRM (38.133) [NR\_n3\_BW]

#### 9.24.4 Others [NR\_n3\_BW]

### 9.25 Adding 50 MHz channel bandwidth (15, 30 and 60kHz SCS) in NR band n65 [NR\_n65\_BW]

#### 9.25.1 UE RF (38.101-1) [NR\_n65\_BW]

**R4-2000089 n65 50MHz AMPR**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001210 Band n65 - Adding Channel BW - UE RF REFSENS**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution is proposing REFSENS requirement adding 50MHZ CBW in band n65

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001211 Band n65 - Adding Channel BW - UE RF A-MPR**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution is discussing A-MPR simulations for coexistence when adding 50MHZ CBW in band n65

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.25.2 BS RF (38.104) [NR\_n65\_BW]

#### 9.25.3 RRM (38.133) [NR\_n65\_BW]

#### 9.25.4 Others [NR\_n65\_BW]

### 9.26 Introduction of NR Band n53 [NR\_n53]

**R4-2000325 Introduction of LTE re-farming band n53 to NR specification**

*Type: other For: Approval  
 Source: Samsung Electronics Co., Ltd*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.26.1 UE RF (38.101-1) [NR\_n53]

**R4-2000094 n53 RF Requirements**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000519 Introduction of n53 into TS 38.101-1**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0224 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.26.2 BS RF (38.104) [NR\_n53]

**R4-2000342 Introduction of n53**

*Type: CR For: Agreement  
 36.104 v16.4.0 CR-4890 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000343 Introduction of n53**

*Type: CR For: Agreement  
 36.141 v16.4.0 CR-1248 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000344 Introduction of n53**

*Type: CR For: Agreement  
 37.104 v16.4.0 CR-0894 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000345 Introduction of n53**

*Type: CR For: Agreement  
 37.141 v16.4.0 CR-0919 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000346 Introduction of n53**

*Type: CR For: Agreement  
 37.105 v16.2.0 CR-0182 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000347 Introduction of n53**

*Type: CR For: Agreement  
 37.145-1 v16.2.0 CR-0209 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000348 Introduction of n53**

*Type: CR For: Agreement  
 37.145-2 v16.2.0 CR-0218 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000349 Introduction of n53**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0127 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000350 Introduction of n53**

*Type: CR For: Agreement  
 38.141-1 v16.2.0 CR-0087 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000351 Introduction of n53**

*Type: CR For: Agreement  
 38.141-2 v16.2.0 CR-0106 Cat: B (Rel-16)  
  
 Source: Nokia, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.26.3 RRM (38.133) [NR\_n53]

**R4-2001347 Introduction of n53 into 38.133**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0486 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Globalstar*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.26.4 Others [NR\_n53]

### 9.27 Closed Rel-16 NR spectrum related WIs [WI code]

**R4-2000110 Correction n91 and n93 UL channel BW**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0186 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

5 MHz is missing from Table 5.3.6-1

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.27.1 UE RF [WI code]

**R4-2000123 CR on SAR solution for TDD&TDD EN-DC PC2 UE**

*Type: CR For: Agreement  
 38.101-3 v16.2.1 CR-0159 Cat: F (Rel-16)  
  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000146 Corrections to n65**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0191 Cat: F (Rel-16)  
  
 Source: Dish Network*

**Abstract:**

Adding NS\_05 and NS\_05U for n65. Removing erroneous UE protection requirement from UE Spurious emissions table. Modifying B34 protection requirement to be applicable when the carrier is confined within 1920-1980MHz.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000412 n41 and n90 network compatibility**

*Type: other For: Approval  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000419 CR for 38.101-1: Missing 70 MHz for NS\_01**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0212 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000852 Maintenance on the UE BW for n92 and n94**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0241 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001038 Maintenance on the Rx-Tx separation terms**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0242 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001075 CR for 38.101-1 to correct CA\_n8A-n75A REFSENS**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0247 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002116 CR for 38.101-1: Mandatory support for n41 by UEs that support n90**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0273 Cat: F (Rel-16)  
  
 Source: Sprint Corporation*

**Abstract:**

At RAN4#91 there was an agreed Way Forward in R4-1907714 that says "The UE supporting new band shall also support band n41." This requirement has not adequately been reflected in the specs.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002139 Correction to CA bandwidth class B**

*Type: CR For: Agreement  
 38.101-1 v16.2.0 CR-0276 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.27.2 BS RF [WI code]

**R4-2001039 Maintenance on the BS BW for n92 and n94**

*Type: CR For: Agreement  
 38.104 v16.2.0 CR-0143 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.27.3 RRM [WI code]

**R4-2000814 introduce n18 into TS38.133**

*Type: CR For: Agreement  
 38.133 v16.2.0 CR-0460 Cat: F (Rel-16)  
  
 Source: KDDI Corporation*

**Abstract:**

This is agreed in R4-1906307 at RAN4#91 and RP-191244 at RAN#84 but not implemented in the specification correctly.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 9.27.4 Demodulation and CSI [WI code]

## 10 Rel-16 Study Items for NR

### 10.2 Study on radiated metrics and test methodology for the verification of multi-antenna reception perf. of NR UEs [FS\_NR\_MIMO\_OTA\_test]

#### 10.2.1 General [FS\_NR\_MIMO\_OTA\_test]

**R4-2000894 TR38.827 v1.1.0 NR MIMO OTA**

*Type: draft TR For: Approval  
 38.827 v1.1.0  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000897 TP to TR 38.827 v1.1.0 on general part**

*Type: pCR For: Approval  
 38.827 v1.1.0  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.2.2 Performance metrics [FS\_NR\_MIMO\_OTA\_test]

**R4-2000272 Proposal on MIMO OTA performance metrics for FR2**

*Type: other For: Approval  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000895 TP to TR 38.827 v1.1.0 on FR2 MIMO OTA performance metrics**

*Type: pCR For: Approval  
 38.827 v1.1.0  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.2.3 Testing methodologies [FS\_NR\_MIMO\_OTA\_test]

##### 10.2.3.1 FR1 test methodologies [FS\_NR\_MIMO\_OTA\_test]

**R4-2002156 Reference Spatial Correlation Curves for Different NR FR1 MIMO OTA Test Frequencies**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution presents the spatial correlation reference curves for NR MIMO OTA models at different test frequencies.

**Discussion:**

.

**Decision:** The document was **not treated**.

##### 10.2.3.2 FR2 test methodologies [FS\_NR\_MIMO\_OTA\_test]

**R4-2000080 Dynamic geometry-based MIMO OTA Testing**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

We provide observations about limits of the current test methodology and propose to further study dynamic geometry-based MIMO OTA methodology

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000505 Study feasible SNR ranges for NR FR2 MIMO OTA in 3D MPAC**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Abstract:**

In this paper, we provide the analysis on the feasible SNR ranges for static MIMO OTA in 3D-MPAC system.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000896 TP to TR 38.827 v1.1.0 on FR2 preliminary MU assessment**

*Type: pCR For: Approval  
 38.827 v1.1.0  
 Source: CAICT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002069 DoT selection for FR2 channel model**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

The two channel models, InO CDL-A, and UMi CDL-C have been chosen for FR2 [4] as the working assumption for analysis in the ad-hoc group. This contribution looks at these two channel models with spatial filtering and thresholding, and the resulting selec

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002070 TP for DoT selection for FR2 channel model**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

Text Proposal for DoT selection: The two channel models, InO CDL-A, and UMi CDL-C have been chosen for FR2 [4] as the working assumption for analysis in the ad-hoc group. This contribution looks at these two channel models with spatial filtering and thr

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002073 System Design and Probe layout for FR2 MPAC MIMO OTA**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

This contribution looks at the design and layout of probes in order to reproduce the desired FR2 channel model in the test volume.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002074 TP for System Design and Probe layout for FR2 MPAC MIMO OTA**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

TP for: This contribution looks at the design and layout of probes in order to reproduce the desired FR2 channel model in the test volume.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002100 Verification of FR2 channel models in MPAC system**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

The target of the validation is to guarantee that given propagation conditions or Figure of Merits are created to the test volume.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002102 TP for Verification of FR2 channel models in MPAC system**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

The target of the validation is to guarantee that given propagation conditions or Figure of Merits are created to the test volume.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002117 Discussion on test system implementation for FR2 MIMO OTA**

*Type: other For: Approval  
 Source: ROHDE & SCHWARZ*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002151 TP to TR38.827: FR2 MIMO OTA Calibration and Test Procedures**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This text proposal adds the calibration and test procedures into TR 38.827

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002152 TP to 38.827 to introduce EUT orientations for FR2**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is introducing the TP for the EUT orientations used for the NR FR2 MIMO OTA 3D scan

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002153 Sample SNR ranges in FR2 OTA setup**

*Type: other For: Information  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is addressing the action item captured in the last WF on feasible SNR range

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002154 PSP Correlation between two CE Vendors**

*Type: other For: Information  
 Source: Keysight Technologies UK Ltd, Spirent Communications*

**Abstract:**

This contribution provides a brief overview of a PSP correlation exercise between the two CE vendors that have provided PSP simulations in the past.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002155 System Implementation of FR2 3D MPAC Systems**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

In this contribution, we propose one set of optimal probe locations for an FR2 3D MPAC system, which can efficiently emulate the behaviour of InO CDL-A and UMi CDL-C models inside the chamber.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002157 Joint Power-Angle-Delay profiles for FR2 NR MIMO OTA channel models validation and PSP evaluation**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution presents the joint power-angle-delay (PADP) estimates for NR FR2 MIMO OTA models at FR1 frequency band, i.e., 2600 MHz, scaled down from FR2.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.2.4 Channel Models [FS\_NR\_MIMO\_OTA\_test]

**R4-2000798 Initial phase of MIMO OTA channel model**

*Type: other For: Approval  
 Source: MediaTek Beijing Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002149 Clarification of Beam Forming Weights**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is providing clarifications on the channel model coefficient equations in Section 7.2 of TR38.827

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002150 Initial phase definition of channel models**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

This contribution is discussing the need for the scalar initial phase terms to be fixed.

**Discussion:**

.

**Decision:** The document was **not treated**.

### 10.3 Study on 7 - 24GHz frequency range [FS\_7to24GHz\_NR]

#### 10.3.1 General [FS\_7to24GHz\_NR]

**R4-2001837 TP to TR 38.820: cleanup**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Huawei*

**Abstract:**

Cleanup of the whole TS 38.820 is provided in this contribution.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001838 TR 38.820, v2.0.0: implementation of TPs from RAN4#94-e**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Huawei*

**Abstract:**

This is the TR 38.820 v.2.0.0 placeholder for implementation of TPs to be agreed during RAN4#94-e meeting.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.3.2 Regulatory survey [FS\_7to24GHz\_NR]

**R4-2001834 TP to TR 38.820: summary on the frequency bands of interest within 7-24 GHz range**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Huawei*

**Abstract:**

This contribution provides a list of frequency bands of interest, capturing inputs collects during RAN Drafts discussion, and later extended by inputs from CEPT and ATU regional preparatory meetings towards WRC-19.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001835 WRC-19 conclusions on IMT in 7 – 24 GHz range**

*Type: other For: Discussion  
 Source: Huawei*

**Abstract:**

This contribution provides summary of the WRC-19 outcomes for IMT in 7 – 24 GHz range and related deployment scenarios.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001836 TP to TR 38.820: WRC-19 conclusions**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Huawei*

**Abstract:**

TP to TR 38.820 on WRC-19 outcomes for IMT in 7 – 24 GHz range and related deployment scenarios.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.3.3 Boundary frequency and/or boundary conditions [FS\_7to24GHz\_NR]

#### 10.3.4 NR system parameters analysis [FS\_7to24GHz\_NR]

#### 10.3.5 Deployment scenarios [FS\_7to24GHz\_NR]

**R4-2001017 TP to TR 38.820: Addition of technical background for BS classes in subclause 7.3**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Ericsson*

**Abstract:**

At the end of the contribution a text proposal with information relevant for 7 to 24 GHz is attached for approval. The text proposal adds missing information to TR 38.820, subclause 7.3.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.3.6 RF technology aspects [FS\_7to24GHz\_NR]

**R4-2001018 TP to TR 38.820: Phase noise trends and example parameterized phase noise model in subclause 5.5.3 and Annex B**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Ericsson*

**Abstract:**

In this contribution, it is proposed to add the background information around phase noise trends considering PLL and VCO contributions in a new Annex and example parameterized model for phase noise characteristics in TR 38.820.

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.3.7 NR UE [FS\_7to24GHz\_NR]

##### 10.3.7.1 NR UE architecture [FS\_7to24GHz\_NR]

##### 10.3.7.2 TX requirements [FS\_7to24GHz\_NR]

##### 10.3.7.3 RX requirements [FS\_7to24GHz\_NR]

#### 10.3.8 NR BS [FS\_7to24GHz\_NR]

##### 10.3.8.1 BS types, BS requirement sets [FS\_7to24GHz\_NR]

**R4-2000673 TP to TR 38.820: BS classes for 7-24 GHz frequency range**

*Type: pCR For: Approval  
 38.820 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The BS classes section 7.3 in TR 38.820 for 7 - 24 GHz frequency range remains to be filled in. This contribution provides a TP to fill in this section in the TR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000686 TP to TR 38.820: BS classes for 7-24 GHz frequency range**

*Type: pCR For: Approval  
 38.820 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The BS classes section 7.3 in TR 38.820 for 7 - 24 GHz frequency range remains to be filled in. This contribution provides a TP to fill in this section in the TR.

**Discussion:**

.

**Decision:** The document was **withdrawn**.

##### 10.3.8.2 NR BS architecture [FS\_7to24GHz\_NR]

##### 10.3.8.3 TX requirements [FS\_7to24GHz\_NR]

##### 10.3.8.4 RX requirements [FS\_7to24GHz\_NR]

**R4-2000674 TP to TR 38.820: Update of BS receiver requirements for 7-24 GHz frequency range**

*Type: pCR For: Approval  
 38.820 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The TP to TR 38.820 for BS ICS requirements for 7 - 24 GHz frequency range was approved during RAN4#93. It has been identified that there are some issues in this approved TP. This contribution provides a TP to update TR 38.820 to rectify the identified is

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000687 TP to TR 38.820: Update of BS receiver requirements for 7-24 GHz frequency range**

*Type: pCR For: Approval  
 38.820 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The TP to TR 38.820 for BS ICS requirements for 7 - 24 GHz frequency range was approved during RAN4#93. It has been identified that there are some issues in this approved TP. This contribution provides a TP to update TR 38.820 to rectify the identified is

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2001016 TP to TR 38.820: Addition of technical background for co-location OOB receiver blocking in subclause 7.4**

*Type: pCR For: Approval  
 38.820 v1.0.0  
 Source: Ericsson*

**Abstract:**

The technical background for co-location out-of-band receiver blocking is currently not captured in TR 38.820. The text proposal [1] presented last meeting was not approved. In this contribution background information have been collected in a text proposa

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 10.3.9 BS EMC [FS\_7to24GHz\_NR]

## 12 Liaison and output to other groups

**R4-2000781 On secondary DRX group for FR1+FR2 CA**

*Type: other For: Discussion  
 38.133 v..  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000782 LS on secondary DRX group for FR1+FR2 CA**

*Type: LS out For: Approval  
 to RAN2, RAN1  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001753 Discussions on RRM impact due to secondary DRX group**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution, we discuss the RRM impact of introducing a secondary DRX.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001755 Draft Reply LS on secondary DRX group**

*Type: LS out For: Approval  
 to RAN2  
 Source: Ericsson*

**Abstract:**

This contribution contains draft LS response related to RRM impact of introducing a secondary DRX.

**Discussion:**

.

**Decision:** The document was **not treated**.

## 13 Revision of the Work Plan

### 13.1 Simplification of band combinations in RAN4 specifications

**R4-2001068 Discussion on improvement of request, SR and BC basket WID index table**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002108 Further discussion on simplification of EN-DC configuration including FR2**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 13.2 R17 new proposals

**R4-2000009 Views on the NR FR1 TRP/TRS requirement specification**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000753 New SID on high-power UE operation for fixed-wireless/vehicle-mounted use cases in Band 12 and in Band 5**

*Type: SID new For: Information  
 Source: US Cellular Corporation*

**Abstract:**

Support for fixed wireless and vehicle mounted user equipment usage scenarios, with broader rural coverage and higher data rates is envisioned as part of deployment configurations in LTE band 12 and band 5. Improvements in coverage, availability, and thr

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 13.2.1 Basket WI approach for adding existing channel bandwidth on existing NR bands

**R4-2001213 New Basket WI adding new CBW in existing NR bands - status**

*Type: WID new For: Information  
 Source: Ericsson*

**Abstract:**

This contribution is giving updates on the new WI basket proposal submitted in last RAN meeting

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 13.2.2 Proposals on adding “brand new” channel bandwidth

**R4-2000025 Solutions for unusual Spectrum allocations for NR bands**

*Type: other For: Approval  
 Source: Apple*

**Abstract:**

Discusses solutions to use "brand new" bandwidths

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000072 Discussion for new WI on introduction of brand new channel bandwidths for NR**

*Type: other For: Discussion  
 Source: Huawei, HiSilicon*

**Abstract:**

This paper provides the motivation on the new WI proposal of introduction of brand new channel bandwidth, and the initial consideration on methodology for it.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000073 New WID proposal: introduction of brand new channel bandwidths for NR**

*Type: WID new For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

Draft WID on introduction of brand new channel bandwidth for NR.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000433 Channel BWs discussion**

*Type: other For: Discussion  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000434 Channel BWs motivation**

*Type: other For: Discussion  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000435 New SID: Efficient utilization of licensed spectrum that is not aligned with existing NR channel bandwidths**

*Type: SID new For: Information  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000651 Discussion on solutions to handle brand new channel bandwidth**

*Type: other For: Discussion  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001219 On adding brand new channel bandwidth for existing band**

*Type: other For: Approval  
 Source: MediaTek Inc*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 13.2.3 Basket WIs for LTE CA, EN-DC, NR CA and NR DC

**R4-2000274 Proposal on new Rel-17 Basket: NR inter-band Carrier Aggregation and Dual connectivity for DL 4 bands and 2UL bands**

*Type: WID new For: Information  
 Source: Samsung*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000496 New WID: EN-DC of x bands (x=1,2,3) LTE inter-band CA (xDL/1UL) and 3 bands NR inter-band CA (3DL/1UL)**

*Type: WID new For: Information  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001090 New WI Rel-17 NR inter-band CA for 5 bands DL with x bands UL (x=1, 2)**

*Type: WID new For: Information  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001091 Rel-17 New WID on SA NR SUL, NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP)**

*Type: WID new For: Information  
 Source: Huawei, HiSilicon*

**Discussion:**

.

**Decision:** The document was **not treated**.

#### 13.2.4 Others

**R4-2000024 FR2 RF enhancements for Rel-17**

*Type: other For: Discussion  
 Source: Apple Inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000074 New WID proposal: supporting overlapping CA for LTE**

*Type: WID new For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

New WID for LTE overlapping CA.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000075 New WID proposal: Introduction of new FR2 FWA UE power class**

*Type: WID new For: Information  
 Source: Huawei, HiSilicon*

**Abstract:**

New WID for FR2 PC5 UE.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000129 Addition of operating bands (Downlink-Only) for LTE-based 5G Terrestrial Broadcast**

*Type: WID new For: Information  
 Source: ABS*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000468 Motivation to introduce new R17 WI on further RRM enhancement**

*Type: other For: Discussion  
 Source: MediaTek inc.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000587 Motivation on further enhancement for NR RRM requirement in Rel-17**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000588 New WID on further enhancement for NR RRM requirement in Rel-17**

*Type: WID new For: Information  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000629 Motivation on basket WI on V2X band combination**

*Type: other For: Discussion  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000630 New basket WID: V2X band combination for supporting co-current operation between Uu frequency bands and V2X bands**

*Type: WID new For: Information  
 Source: CATT*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000757 New WID on Introduction of new FR2 FWA UE with maximum TRP of 23dBm**

*Type: WID new For: Information  
 Source: SoftBank Corp.*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000758 Motivation for Introduction of new FR2 FWA NR UE with maximum TRP of 23dBm**

*Type: other For: Information  
 Source: SoftBank Corp., Rakuten Mobile, KDDI, NTT DOCOMO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000788 Motivation on Rel-17 further RRM enhancements**

*Type: other For: Information  
 Source: Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000883 Consideration on NR SISO OTA WI**

*Type: other For: Discussion  
 38.101-1 v..  
 Source: vivo*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000884 Motivation for NR FR1 UE TRP and TRS**

*Type: other For: Discussion  
 Source: vivo, CMCC, CAICT, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000885 New WID: NR FR1 UE SA and EN-DC TRP and TRS**

*Type: WID new For: Information  
 Source: vivo, CMCC, CAICT, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **withdrawn**.

**R4-2000903 New WID on air-to-ground network for NR**

*Type: WID new For: Information  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000904 Motivation for new WI on air-to-ground network for NR**

*Type: WID new For: Information  
 Source: CMCC*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000957 Motivation to introduce new R17 SI\_WI on measurement gap enhancements**

*Type: other For: Discussion  
 Source: Intel Corporation, Apple*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000971 New proposed WID on Introduction of standalone NB-IoT into AAS spec**

*Type: WID new For: Information  
 Source: ZTE Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001212 New SID - 6GHz range investigation**

*Type: SID new For: Information  
 Source: Ericsson*

**Abstract:**

This SI is proposing investigating requirements for the upper 6GHz band, preparing answers to ITU-R's requests after WRC-19 identified this frequency range for IMT

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001235 New SID on NR FR1 and EN-DC FR1 UE TRP and TRS**

*Type: SID new For: Information  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001236 Motivation of NR FR1 TRP TRS new study item**

*Type: other For: Information  
 Source: OPPO*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001801 New WID: NR FR1 UE SA and EN-DC TRP and TRS**

*Type: WID new For: Information  
 Source: vivo, CMCC, CAICT, Rohde & Schwarz*

**Discussion:**

.

**Decision:** The document was **not treated**.

### 13.3 Others

**R4-2000815 New WID on introduction of n13**

*Type: WID new For: Information  
 Source: Huawei, HiSilicon, Bell*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 14 Any other business

**R4-2000421 CR for 36.101: Missing Pcmax tolerance for 23-33 dBm in Table 6.2.5A-2 and Table 6.2.5B-1**

*Type: CR For: Agreement  
 36.101 v15.9.0 CR-5592 Cat: F (Rel-15)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2000422 Mirror CR for 36.101: Missing Pcmax tolerance for 23-33 dBm in Table 6.2.5A-2 and Table 6.2.5B-1**

*Type: CR For: Agreement  
 36.101 v16.4.0 CR-5593 Cat: A (Rel-16)  
  
 Source: Sprint Corporation*

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2001860 Managing RAN4 work load**

*Type: other For: Approval  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, ZTE, Mediatek, Qualcomm, Verizon, AT&T, T-Mobile, Softbank, KDDI, NTT DoCoMo, Rohde & Schwarz, US Cellular*

**Abstract:**

This is a wayforward containing proposals for managing RAN4 work load by reducing and avoiding redundant contributions.

**Discussion:**

.

**Decision:** The document was **not treated**.

**R4-2002110 Clarification on Rx image assumption for intra-band non-contiguous NR CA/EN-DC**

*Type: other For: (not specified)  
 Source: NTT DOCOMO INC.*

**Discussion:**

.

**Decision:** The document was **not treated**.

## 15 Close of the E-meeting

Report prepared by: Kai-Erik Sunell