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

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## 1 Opening of the meeting

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## 3A Topic Summary (pre-meeting)

This agenda item is only for at-meeting-generated content related to topic summary.

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### 3A.2 RRM session topic summaries

### 3A.3 BSRF\_Demod session topic summaries

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TDoc | Title | Source | Type | For | Abstract | Agenda item | TDoc Status | Decision |
| R4-2318193 | Topic summary for [109][301] BSRF\_Maintenance | Moderator (Ericsson) | other | Information | [109][300] BDaT Session | 6.4 | reserved |  |
| R4-2318194 | Topic summary for [109][302] NR\_ATG\_BSRF | Moderator (ZTE) | other | Information | [109][300] BDaT Session | 8.13.9 | reserved |  |
| R4-2318195 | Topic summary for [109][303] NR\_FR1\_lessthan\_5MHz\_BW\_BSRF | Moderator (Nokia) | other | Information | [109][300] BDaT Session | 8.14.7 | reserved |  |
| R4-2318196 | Topic summary for [109][304] NR\_LTE\_EMC\_enh | Moderator (Ericsson) | other | Information | [109][300] BDaT Session | 8.17.3 | reserved |  |
| R4-2318197 | Topic summary for [109][305] FS\_NR\_duplex\_evo\_Part1 | Moderator (Samsung) | other | Information | [109][300] BDaT Session | 8.19.4 | reserved |  |
| R4-2318198 | Topic summary for [109][306] FS\_NR\_duplex\_evo\_Part2 | Moderator (Qualcomm) | other | Information | [109][300] BDaT Session | 8.19.4 | reserved |  |
| R4-2318199 | Topic summary for [109][307] FS\_NR\_duplex\_evo\_Part3 | Moderator (CMCC) | other | Information | [109][300] BDaT Session | 8.19.4 | reserved |  |
| R4-2318200 | Topic summary for [109][308] NR\_NTN\_enh\_Part1 | Moderator (Thales) | other | Information | [109][300] BDaT Session | 8.26.9 | reserved |  |
| R4-2318201 | Topic summary for [109][309] NR\_NTN\_enh\_Part2 | Moderator (Ericsson) | other | Information | [109][300] BDaT Session | 8.26.9 | reserved |  |
| R4-2318202 | Topic summary for [109][310] NR\_NTN\_enh\_Part3 | Moderator (Samsung) | other | Information | [109][300] BDaT Session | 8.26.9 | reserved |  |
| R4-2318203 | Topic summary for [109][311] NR\_netcon\_repeater\_RF | Moderator (ZTE) | other | Information | [109][300] BDaT Session | 8.28.7 | reserved |  |
| R4-2318204 | Topic summary for [109][312] NR\_netcon\_repeater\_RFConformance | Moderator (CATT) | other | Information | [109][300] BDaT Session | 8.28.7 | reserved |  |
| R4-2318205 | Topic summary for [109][313] NR\_mobile\_IAB\_RF | Moderator (Qualcomm) | other | Information | [109][300] BDaT Session | 8.33.7 | reserved |  |
| R4-2318206 | Topic summary for [109][314] IoT\_NTN\_SANRF | Moderator (Huawei) | other | Information | [109][300] BDaT Session | 6.4 | reserved |  |
| R4-2318207 | Topic summary for [109][315] Demod\_Maintenance | Moderator (Nokia) | other | Information | [109][300] BDaT Session | 5.4 | reserved |  |
| R4-2318208 | Topic summary for [109][316] RF\_FR1\_enh2\_Demod | Moderator (Huawei) | other | Information | [109][300] BDaT Session | 8.3.4 | reserved |  |
| R4-2318209 | Topic summary for [109][317] NR\_RF\_FR2\_req\_Ph3\_Demod | Moderator (Nokia) | other | Information | [109][300] BDaT Session | 8.6.5 | reserved |  |
| R4-2318210 | Topic summary for [109][318] NR\_FR2\_multiRX\_DL\_Demod | Moderator (Qualcomm) | other | Information | [109][300] BDaT Session | 8.7.5 | reserved |  |
| R4-2318211 | Topic summary for [109][319] NonCol\_intraB\_ENDC\_NR\_CA\_Demod | Moderator (Ericsson) | other | Information | [109][300] BDaT Session | 8.11.5 | reserved |  |
| R4-2318212 | Topic summary for [109][320] NR\_HST\_FR2\_enh\_Demod | Moderator (Samsung) | other | Information | [109][300] BDaT Session | 8.12.4 | reserved |  |
| R4-2318213 | Topic summary for [109][321] NR\_ATG\_Demod | Moderator (CMCC) | other | Information | [109][300] BDaT Session | 8.13.9 | reserved |  |
| R4-2318214 | Topic summary for [109][322] NR\_FR1\_lessthan\_5MHz\_BW\_demod | Moderator (Nokia) | other | Information | [109][300] BDaT Session | 8.14.7 | reserved |  |
| R4-2318215 | Topic summary for [109][323] NR\_demod\_enh3\_Part1 | Moderator (CTC) | other | Information | [109][300] BDaT Session | 8.18.4 | reserved |  |
| R4-2318216 | Topic summary for [109][324] NR\_NTN\_enh\_SAN\_UE\_demod | Moderator (Huawei) | other | Information | [109][300] BDaT Session | 8.26.9 | reserved |  |
| R4-2318217 | Topic summary for [109][325] NR\_cov\_enh2\_demod | Moderator (CTC) | other | Information | [109][300] BDaT Session | 8.27.3 | reserved |  |
| R4-2318218 | Topic summary for [109][326] NR\_netcon\_repeater\_Demod | Moderator (ZTE) | other | Information | [109][300] BDaT Session | 8.28.7 | reserved |  |
| R4-2318219 | Topic summary for [109][327] NR\_MIMO\_evo\_DL\_UL\_demod | Moderator (Samsung) | other | Information | [109][300] BDaT Session | 8.29.5 | reserved |  |
| R4-2318220 | Topic summary for [109][328] NR\_SL\_enh2\_demod | Moderator (LGE) | other | Information | [109][300] BDaT Session | 8.30.6 | reserved |  |
| R4-2318221 | Topic summary for [109][329] NR\_mobile\_IAB\_demod | Moderator (Ericsson) | other | Information | [109][300] BDaT Session | 8.33.7 | reserved |  |
| R4-2318222 | Topic summary for [109][330] Netw\_Energy\_NR\_demod | Moderator (Huawei) | other | Information | [109][300] BDaT Session | 8.34.6 | reserved |  |
| R4-2318223 | Topic summary for [109][331] NR\_DSS\_enh | Moderator (Ericsson) | other | Information | [109][300] BDaT Session | 8.36.3 | reserved |  |
| R4-2318224 | Topic summary for [109][332] IoT\_NTN\_Demod | Moderator (MediaTek) | other | Information | [109][300] BDaT Session | 9.6.7 | reserved |  |
| R4-2318225 | Topic summary for [109][333] OTA\_Maintenance (placeholder) | Moderator (Keysight) | other | Information | [109][300] BDaT Session | 5.4 | reserved |  |
| R4-2318226 | Topic summary for [109][334] FS\_NR\_FR2\_OTA\_enh | Moderator (Qualcomm) | other | Information | [109][300] BDaT Session | 8.2.6 | reserved |  |
| R4-2318227 | Topic summary for [109][335] NR\_FR1\_TRP\_TRS\_enh | Moderator (vivo) | other | Information | [109][300] BDaT Session | 8.15.4 | reserved |  |
| R4-2318228 | Topic summary for [109][336] NR\_MIMO\_OTA\_enh | Moderator (CAICT) | other | Information | [109][300] BDaT Session | 8.16.6 | reserved |  |
| R4-2318229 | Topic summary for [108][337] RAN\_task\_NTN\_test | Moderator (MediaTek) | other | Information | [109][300] BDaT Session | 12.1 | reserved |  |

## 4 Up to Rel-16 maintenance for LTE and NR

**Guidance for maintenance agendas (AI 4, AI 5 and AI 6)**

The following guidance are provided for AI 4, AI5 and AI6:

- For maintenance agenda AI 4 (up to Rel-16), AI 5 (Rel-17) and AI 6 (Rel-18), formal CRs are expected and multiple formal CRs per company in the lowest agenda are allowed. For tracking the changes easily, it expected that one batch of CRs (Cat-F/A/…) will just cover a single topic/WI rather than multiple topics/WIs and Cat-F CR with corresponding Cat-A CRs needs be submitted under the same agenda.

- When submitting contributions to AI 4, AI 5 and AI 6, please add [WI\_code] in the beginning of titles for both discussion files and CRs to facilitate moderators and session chairs handling.

- When reserving the tdoc number, please use the correct WI code rather than simply using TEI and fill the column of “Related WIs” in your reservation spreadsheet. If you submit a CR with TEI as WI code, please inform session chair.

### 4.1 UE RF requirements

### 4.2 BS RF requirements and BS conformance testing

**R4-2318284 CR for TS 38.176-2, Correction on scaling factor for IAB-MT type 1-O**

*Type: CR For: Agreement  
 38.176-2 v16.7.0 CR-0034 rev Cat: F (Rel-16)  
  
 Source: CATT*

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

**R4-2318285 CR for TS 38.176-2, Correction on scaling factor for IAB-MT type 1-O**

*Type: CR For: Agreement  
 38.176-2 v17.6.0 CR-0035 rev Cat: A (Rel-17)  
  
 Source: CATT*

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

**R4-2318286 CR for TS 38.176-2, Correction on scaling factor for IAB-MT type 1-O**

*Type: CR For: Agreement  
 38.176-2 v18.2.0 CR-0036 rev Cat: A (Rel-18)  
  
 Source: CATT*

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

**R4-2318287 CR for TS 38.115-2, Remove multi-band related content for repeater type 2-O**

*Type: CR For: Agreement  
 38.115-2 v17.3.0 CR-0009 rev Cat: F (Rel-17)  
  
 Source: CATT*

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

**R4-2318288 Discussion on reference of PREFSENS**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2318289 CR for TS 38.141-1, Correction on reference of PREFSENS**

*Type: CR For: Agreement  
 38.141-1 v16.17.0 CR-0378 rev Cat: F (Rel-16)  
  
 Source: CATT*

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

**R4-2318290 CR for TS 38.141-1, Correction on reference of PREFSENS**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0379 rev Cat: A (Rel-17)  
  
 Source: CATT*

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

**R4-2318291 CR for TS 38.141-1, Correction on reference of PREFSENS**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0380 rev Cat: A (Rel-18)  
  
 Source: CATT*

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

**R4-2318292 CR for TS 38.141-2, Correction on title of Table 4.7.2.1-2 for test signal for BS type 2-O**

*Type: CR For: Agreement  
 38.141-2 v17.11.0 CR-0547 rev Cat: F (Rel-17)  
  
 Source: CATT*

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

**R4-2318366 [NR\_RF\_FR1-Core] CR to TS 38.104 on correction of transmitter spurious emissions for protection of Band n20**

*Type: CR For: Agreement  
 38.104 v16.17.0 CR-0522 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct band number in table for protection of Band n20.

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

**R4-2318367 [NR\_RF\_FR1-Core] CR to TS 38.104 on correction of transmitter spurious emissions for protection of Band n20**

*Type: CR For: Agreement  
 38.104 v17.11.0 CR-0523 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct band number in table for protection of Band n20.

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

**R4-2318368 [NR\_RF\_FR1-Core] CR to TS 38.104 on correction of transmitter spurious emissions for protection of Band n20**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0524 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct band number in table for protection of Band n20.

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

**R4-2318369 [NR\_unlic-Perf] CR to TS 38.141-1 on correction of table numbers for Local Area BS in-channel selectivity for bands n46, n96 and n102**

*Type: CR For: Agreement  
 38.141-1 v16.17.0 CR-0381 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct table numbers for Local Area BS in-channel selectivity for bands n46, n96 and n102.

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

**R4-2318370 [NR\_unlic-Perf] CR to TS 38.141-1 on correction of table numbers for Local Area BS in-channel selectivity for bands n46, n96 and n102**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0382 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct table numbers for Local Area BS in-channel selectivity for bands n46, n96 and n102.

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

**R4-2318371 [NR\_unlic-Perf] CR to TS 38.141-1 on correction of table numbers for Local Area BS in-channel selectivity for bands n46, n96 and n102**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0383 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct table numbers for Local Area BS in-channel selectivity for bands n46, n96 and n102.

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

**R4-2318372 [NR\_n18-Core] CR to TS 36.104 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 36.104 v16.14.0 CR-4980 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence and co-location tables for transmitter spurious emissions.

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

**R4-2318373 [NR\_n18-Core] CR to TS 36.104 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 36.104 v17.10.0 CR-4981 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence and co-location tables for transmitter spurious emissions.

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

**R4-2318374 [NR\_n18-Core] CR to TS 36.104 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 36.104 v18.3.0 CR-4982 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence and co-location tables for transmitter spurious emissions.

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

**R4-2318375 [NR\_n18-Perf] CR to TS 36.141 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 36.141 v16.17.0 CR-1367 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence and co-location tables for transmitter spurious emissions.

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

**R4-2318376 [NR\_n18-Perf] CR to TS 36.141 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 36.141 v17.10.0 CR-1368 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence and co-location tables for transmitter spurious emissions.

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

**R4-2318377 [NR\_n18-Perf] CR to TS 36.141 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 36.141 v18.2.0 CR-1369 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence and co-location tables for transmitter spurious emissions.

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

**R4-2318378 [NR\_n18-Perf] CR to TS 37.145-1 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 37.145-1 v16.14.0 CR-0328 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence table for transmitter spurious emissions.

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

**R4-2318379 [NR\_n18-Perf] CR to TS 37.145-1 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 37.145-1 v17.9.0 CR-0329 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence table for transmitter spurious emissions.

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

**R4-2318380 [NR\_n18-Perf] CR to TS 37.145-1 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 37.145-1 v18.3.0 CR-0330 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence table for transmitter spurious emissions.

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

**R4-2318381 [NR\_n18-Perf] CR to TS 38.141-1 on correction of table reference for Band n18 transmitter spurious emissions**

*Type: CR For: Agreement  
 38.141-1 v16.17.0 CR-0384 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct table reference for Band n18 transmitter spurious emissions.

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

**R4-2318382 [NR\_n18-Perf] CR to TS 38.141-1 on correction of table reference for Band n18 transmitter spurious emissions**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0385 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct table reference for Band n18 transmitter spurious emissions.

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

**R4-2318383 [NR\_n18-Perf] CR to TS 38.141-1 on correction of table reference for Band n18 transmitter spurious emissions**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0386 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correct table reference for Band n18 transmitter spurious emissions.

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

**R4-2318384 [NR\_n18-Perf] CR to TS 38.141-2 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 38.141-2 v16.17.0 CR-0548 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence table for transmitter spurious emissions.

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

**R4-2318385 [NR\_n18-Perf] CR to TS 38.141-2 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 38.141-2 v17.11.0 CR-0549 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence table for transmitter spurious emissions.

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

**R4-2318386 [NR\_n18-Perf] CR to TS 38.141-2 on correction of transmitter spurious emissions for protection of Band n18**

*Type: CR For: Agreement  
 38.141-2 v18.3.0 CR-0550 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add Band n18 to coexistence table for transmitter spurious emissions.

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

**R4-2319168 Addition of 30 KHz SCS for Sync Raster for Band n53**

*Type: CR For: Agreement  
 38.104 v16.17.0 CR-0534 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2319169 Addition of 30 kHz SCS for Sync Raster for Band n53**

*Type: CR For: Agreement  
 38.104 v17.11.0 CR-0535 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2319420 CR to 37.141: Correction to method of test for GSM/EDGE requirements**

*Type: CR For: Agreement  
 37.141 v15.21.2 CR-1064 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

The CS listed for GSM/EDGE AM suppression in Clause 7 does not match what is listed in the applicability tables in Section 5. The errors were previously introduced when new capability sets were added. There are in addition some related editorial errors.

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

**R4-2319421 CR to 37.141: Correction to method of test for GSM/EDGE requirements**

*Type: CR For: Agreement  
 37.141 v16.19.2 CR-1065 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The CS listed for some GSM/EDGE specific receiver requirements in Clause 7 do not match what is listed in the applicability tables in Section 5. The errors were previously introduced when new capability sets including GSM/EDGE were added. There are in add

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

**R4-2319422 CR to 37.141: Correction to method of test for GSM/EDGE requirements**

*Type: CR For: Agreement  
 37.141 v17.11.2 CR-1066 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

The CS listed for some GSM/EDGE specific receiver requirements in Clause 7 do not match what is listed in the applicability tables in Section 5. The errors were previously introduced when new capability sets including GSM/EDGE were added. There are in add

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

**R4-2319423 CR to 37.141: Correction to method of test for GSM/EDGE requirements**

*Type: CR For: Agreement  
 37.141 v18.3.1 CR-1067 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

The CS listed for some GSM/EDGE specific receiver requirements in Clause 7 do not match what is listed in the applicability tables in Section 5. The errors were previously introduced when new capability sets including GSM/EDGE were added. There are in add

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

**R4-2319681 [ MB\_MSR\_RF] CR to 37.104: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 37.104 v16.18.0 CR-1001 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319682 [MB\_MSR\_RF] CR to 37.104: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 37.104 v17.10.0 CR-1002 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319683 [MB\_MSR\_RF] CR to 37.104: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 37.104 v18.3.0 CR-1003 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319684 [ MB\_MSR\_RF] CR to 37.141: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 37.141 v16.19.2 CR-1069 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319685 [MB\_MSR\_RF] CR to 37.141: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 37.141 v17.11.2 CR-1070 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319686 [MB\_MSR\_RF] CR to 37.141: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 37.141 v18.3.1 CR-1071 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319687 [ MB\_MSR\_RF] CR to 38.104: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 38.104 v16.17.0 CR-0539 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319688 [MB\_MSR\_RF] CR to 38.104: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 38.104 v17.11.0 CR-0540 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319689 [MB\_MSR\_RF] CR to 38.104: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0541 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319690 [ MB\_MSR\_RF] CR to 38.141-1: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 38.141-1 v16.17.0 CR-0393 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319691 [MB\_MSR\_RF] CR to 38.141-1: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0394 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319692 [MB\_MSR\_RF] CR to 38.141-1: clarification on requirements for BS capable of multi-band operation**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0395 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319693 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.141: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.141 v16.19.2 CR-1072 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319694 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.141: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.141 v17.11.2 CR-1073 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319695 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.141: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.141 v18.3.1 CR-1074 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319696 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.145-1: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.145-1 v16.14.0 CR-0333 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319697 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.145-1: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.145-1 v17.9.0 CR-0334 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319698 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.145-1: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.145-1 v18.3.0 CR-0335 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319699 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.145-1: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.145-2 v16.15.0 CR-0369 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319700 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.145-2: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.145-2 v17.9.0 CR-0370 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319701 [MSR\_GSM\_UTRA\_LTE\_NR-Perf] CR to 37.145-2: Power allocation for NC operation**

*Type: CR For: Agreement  
 37.145-2 v18.3.0 CR-0371 rev Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2319801 CR to 37.104: Correction to table note for band 66**

*Type: CR For: Agreement  
 37.104 v16.18.0 CR-1004 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

In the operating bands table, there is a reference to Note 7 for Band 66. There is no such note and the correct reference should be Note 3, which specifically concerns Band 66 only.

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

**R4-2319802 CR to 37.104: Correction to table note for band 67**

*Type: CR For: Agreement  
 37.104 v17.10.0 CR-1005 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

In the operating bands table, there is a reference to Note 7 for Band 66. There is no such note and the correct reference should be Note 3, which specifically concerns Band 66 only.

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

**R4-2319803 CR to 37.104: Correction to table note for band 68**

*Type: CR For: Agreement  
 37.104 v18.3.0 CR-1006 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

In the operating bands table, there is a reference to Note 7 for Band 66. There is no such note and the correct reference should be Note 3, which specifically concerns Band 66 only.

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

**R4-2319804 CR to 37.141: Correction to table note for band 66**

*Type: CR For: Agreement  
 37.141 v16.19.2 CR-1075 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

In the operating bands table, there is a reference to Note 7 for Band 66. There is no such note and the correct reference should be Note 3, which specifically concerns Band 66 only.

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

**R4-2319805 CR to 37.141: Correction to table note for band 67**

*Type: CR For: Agreement  
 37.141 v17.11.2 CR-1076 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

In the operating bands table, there is a reference to Note 7 for Band 66. There is no such note and the correct reference should be Note 3, which specifically concerns Band 66 only.

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

**R4-2319806 CR to 37.141: Correction to table note for band 68**

*Type: CR For: Agreement  
 37.141 v18.3.1 CR-1077 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

In the operating bands table, there is a reference to Note 7 for Band 66. There is no such note and the correct reference should be Note 3, which specifically concerns Band 66 only.

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

**R4-2320353 NR\_IAB-Core: CR to 38.174 Correction of the value of X in IAB-MT OTA receiver spurious emissions**

*Type: CR For: Agreement  
 38.174 v16.9.0 CR-0081 rev Cat: F (Rel-16)  
  
 Source: ZTE*

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

**R4-2320354 NR\_IAB-Core:CR to 38.174 Correction of the value of X in IAB-MT OTA receiver spurious emissions\_Rel17**

*Type: CR For: Agreement  
 38.174 v17.5.0 CR-0082 rev Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

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

**R4-2320355 NR\_IAB-Core:CR to 38.174 Correction of the value of X in IAB-MT OTA receiver spurious emissions\_Rel18**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0083 rev Cat: A (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320451 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v13.16.0 CR-1374 rev Cat: F (Rel-13)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power. Note: the CR coversheet have a space in the WI code on the CR coversheet LTE\_LAA -Perf.

**Decision:** The document was **revised to R4-2320497**.

**R4-2320452 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v14.14.0 CR-1375 rev Cat: A (Rel-14)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power.

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

**R4-2320453 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v15.18.0 CR-1376 rev Cat: A (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power.

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

**R4-2320454 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v16.17.0 CR-1377 rev Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power.

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

**R4-2320455 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v17.10.0 CR-1378 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power.

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

**R4-2320456 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v18.2.0 CR-1379 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power.

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

**R4-2320497 [LTE\_LAA-Perf] CR to TS 36.141 on correction of transmitter OFF power for Band 46**

*Type: CR For: Agreement  
 36.141 v13.16.0 CR-1374 rev 1 Cat: F (Rel-13)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces R4-2320451)

**Abstract:**

Add carrier frequency 4.2GHz < f <= 6.0GHz in the transmitter OFF power.

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

**R4-2320538 CR to align scaling factor for IAB-MT type I-O to IAB-DU type 1-O**

*Type: CR For: Agreement  
 38.174 v16.9.0 CR-0088 rev Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

CR to align scaling factor for IAB-MT type I-O to IAB-DU type 1-O

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

**R4-2320539 CR to align scaling factor for IAB-MT type I-O to IAB-DU type 1-O**

*Type: CR For: Agreement  
 38.174 v17.5.0 CR-0089 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to align scaling factor for IAB-MT type I-O to IAB-DU type 1-O

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

**R4-2320540 CR to align scaling factor for IAB-MT type I-O to IAB-DU type 1-O**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0090 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

CR to align scaling factor for IAB-MT type I-O to IAB-DU type 1-O

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

**R4-2320659 Discussion on clean-up and improvements on BS conformance testing specifications**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution describes issues in current BS specficiations which were identified together with ETSI and European Commission during the process of editing the harmonised standard.

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

**R4-2320660 Proposal for checklist before submitting CR to BS conformance specifications**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

This is a proposal for a checklist for CRs submitted for BS conformance test specifications

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

**R4-2320661 Work plan on clean-up and improvement the BS specifications**

*Type: other For: Discussion  
 Source: Ericsson*

**Abstract:**

Way forward proposals to be approved and revised during the meeting

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

### 4.3 UE/BS EMC requirements

**R4-2320500 CR to TS 37.113 on framework for EMC-specific manufacturer's declarations**

*Type: CR For: Agreement  
 37.113 v17.2.0 CR-0130 rev Cat: F (Rel-18)  
  
 Source: Ericsson, Nokia, ZTE Corporation*

**Abstract:**

Introduce the framework of EMC-specific manufacturer's declarations

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

**R4-2320501 CR to TS 38.113 on removing void clauses under 8.1 and 9.1**

*Type: CR For: Agreement  
 38.113 v15.19.0 CR-0065 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Remove void clauses, since they will not be used.

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

**R4-2320502 CR to TS 38.113 on removing void clauses under 8.1 and 9.1**

*Type: CR For: Agreement  
 38.113 v16.9.0 CR-0066 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Remove void clauses, since they will not be used.

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

**R4-2320503 CR to TS 38.113 on removing void clauses under 8.1 and 9.1**

*Type: CR For: Agreement  
 38.113 v17.5.0 CR-0067 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Remove void clauses, since they will not be used.

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

**R4-2320504 CR to TS 38.113 on removing void clauses under 8.1 and 9.1**

*Type: CR For: Agreement  
 38.113 v18.0.0 CR-0068 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Remove void clauses, since they will not be used.

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

**R4-2320505 CR to TS 38.114 on correction of FR range to FR2-1**

*Type: CR For: Agreement  
 38.114 v17.3.0 CR-0009 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Add FR2-1 limitation in repeater EMC specification. Update the missing reference numbers.

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

**R4-2320506 CR to TS 38.175 on correction of FR range to FR2-1**

*Type: CR For: Agreement  
 38.175 v17.4.0 CR-0032 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Add FR2-1 limitation in IAB EMC specification.

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

**R4-2320507 CR to TS 36.113 on adding link between telecommunication port and wired network port**

*Type: CR For: Agreement  
 36.113 v15.5.0 CR-0089 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Update reference of IEC 61000-6-3. Add note to telecommunication port.

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

**R4-2320508 CR to TS 36.113 on adding link between telecommunication port and wired network port**

*Type: CR For: Agreement  
 36.113 v16.3.0 CR-0090 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Update reference of IEC 61000-6-3. Add note to telecommunication port.

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

**R4-2320509 CR to TS 36.113 on adding link between telecommunication port and wired network port**

*Type: CR For: Agreement  
 36.113 v17.1.0 CR-0091 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Update reference of IEC 61000-6-3. Add note to telecommunication port.

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

**R4-2320510 CR to TS 37.113 on adding link between telecommunication port and wired network port**

*Type: CR For: Agreement  
 37.113 v15.13.0 CR-0131 rev Cat: F (Rel-15)  
  
 Source: Ericsson*

**Abstract:**

Update reference of IEC 61000-6-3. Add note to telecommunication port.

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

**R4-2320511 CR to TS 37.113 on adding link between telecommunication port and wired network port**

*Type: CR For: Agreement  
 37.113 v16.4.0 CR-0132 rev Cat: A (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

Update reference of IEC 61000-6-3. Add note to telecommunication port.

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

**R4-2320512 CR to TS 37.113 on adding link between telecommunication port and wired network port**

*Type: CR For: Agreement  
 37.113 v17.2.0 CR-0133 rev Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Update reference of IEC 61000-6-3. Add note to telecommunication port.

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

**R4-2320824 [AAS\_BS\_LTE\_UTRA-Core, TEI18] CR to TS 37.114: framework for the EMC-specific manufacturer's declarations, Rel-18**

*Type: CR For: Agreement  
 37.114 v17.1.0 CR-0108 rev Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the Draft CR Endorsed in R4-2316933 during RAN4#108bis meeting (Xiamen), a formal CR is provided for the manufacturer declaration framework. This is not a CR for Rel-18 WI outcomes implementation.

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

**R4-2320826 [NR\_newRAT-Perf, TEI18] CR to TS 38.113: framework for the EMC-specific manufacturer's declarations, Rel-18**

*Type: CR For: Agreement  
 38.113 v18.0.0 CR-0069 rev Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the Draft CR Endorsed in R4-2313995 during RAN4#108 meeting (Toulouse), a formal CR is provided.

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

**R4-2320827 [LTE-RF, TEI18] CR to TS 36.113: framework for the EMC-specific manufacturer's declarations, Rel-18**

*Type: CR For: Agreement  
 36.113 v17.1.0 CR-0092 rev Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the Draft CR Endorsed in R4-2313913 during RAN4#108 meeting (Toulouse), a formal CR is provided.

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

**R4-2320829 [LTE-RF, TEI15] EMC test configurations specification simplification**

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

**Abstract:**

In this contribution we provide discussion on the potential simplification of the EMC test configurations.

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

**R4-2320830 [LTE-RF, TEI15] Draft CR to TS 36.113: Example implementation of the draft CR for the test configurations specification simplification, Rel-15**

*Type: draftCR For: Endorsement  
 36.113 v15.5.0 CR- rev Cat: (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on related discussion paper, in this contribution we provide example implementation of the draft CR for the test configurations specification simplification.

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

**R4-2320832 [RInImp9-RFmulti, TEI15] CR to TS 37.113: Test configurations correction for CS7, Rel-15**

*Type: CR For: Agreement  
 37.113 v15.13.0 CR-0134 rev Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

CS7 was mistakenly overlooked in table 4.5-1 on test configurations for single-band Multi-RAT capable MSR BS.

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

**R4-2320833 [RInImp9-RFmulti, TEI15] CR to TS 37.113: Test configurations correction for CS7, Rel-16**

*Type: CR For: Agreement  
 37.113 v16.4.0 CR-0135 rev Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

CS7 was mistakenly overlooked in table 4.5-1 on test configurations for single-band Multi-RAT capable MSR BS.

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

**R4-2320834 [RInImp9-RFmulti, TEI15] CR to TS 37.113: Test configurations correction for CS7, Rel-17**

*Type: CR For: Agreement  
 37.113 v17.2.0 CR-0136 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

CS7 was mistakenly overlooked in table 4.5-1 on test configurations for single-band Multi-RAT capable MSR BS.

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

**R4-2320847 [NR\_IAB-Core] CR to TS 38.175 correction of EMC requirements applicability, Rel-16**

*Type: CR For: Agreement  
 38.175 v16.6.0 CR-0033 rev Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Correction of EMC requirements applicability in a way that the IAB node is covered as a single entity (including MT and DU) not only for Emissions in section 7.1, but also for Immunity requirements in 7.2.

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

**R4-2320848 [NR\_IAB-Core] CR to TS 38.175 correction of EMC requirements applicability, Rel-17**

*Type: CR For: Agreement  
 38.175 v17.4.0 CR-0034 rev Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Correction of EMC requirements applicability in a way that the IAB node is covered as a single entity (including MT and DU) not only for Emissions in section 7.1, but also for Immunity requirements in 7.2.

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

### 4.4 RRM requirements

### 4.5 Demodulation and CSI requirements

**R4-2318081 [NR\_L1enh\_URLLC-Perf] CR to TS38.101-4 Corrections to CQI Reporting tests with 1TX (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0419 rev Cat: F (Rel-16)  
  
 Source: MediaTek inc.*

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

**R4-2318082 [NR\_L1enh\_URLLC-Perf] CR to TS38.101-4 Corrections to CQI Reporting tests with 1TX (Rel-17)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0420 rev Cat: A (Rel-17)  
  
 Source: MediaTek inc.*

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

**R4-2318083 [NR\_L1enh\_URLLC-Perf] CR to TS38.101-4 Corrections to CQI Reporting tests with 1TX (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0421 rev Cat: A (Rel-18)  
  
 Source: MediaTek inc.*

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

**R4-2318084 [NR\_newRAT-Perf] CR to TS38.101-4 Corrections to test parameters for CSI test cases (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0422 rev Cat: F (Rel-16)  
  
 Source: MediaTek inc.*

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

**R4-2318085 [NR\_newRAT-Perf] CR to TS38.101-4 Corrections to test parameters for CSI test cases (Rel-17)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0423 rev Cat: A (Rel-17)  
  
 Source: MediaTek inc.*

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

**R4-2318086 [NR\_newRAT-Perf] CR to TS38.101-4 Corrections to test parameters for CSI test cases (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0424 rev Cat: A (Rel-18)  
  
 Source: MediaTek inc.*

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

**R4-2318091 [NR\_unlic] CR for 38.104: Removal of applicability rule (Rel-16, Cat F)**

*Type: CR For: Agreement  
 38.104 v16.17.0 CR-0519 rev Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318092 [NR\_unlic] CR for 38.104: Removal of applicability rule (Rel-17, Cat A)**

*Type: CR For: Agreement  
 38.104 v17.11.0 CR-0520 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318093 [NR\_unlic] CR for 38.104: Removal of applicability rule (Rel-18, Cat A)**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0521 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318737 [NR\_newRAT-Perf] CR to 38.101-4 Correction to report quantity for 1Tx CQI tests**

*Type: draftCR For: (not specified)  
 38.101-4 v16.14.0 CR- rev Cat: (Rel-16)  
  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2318738 CR to 38.101-4 Correction to report quantity for 1Tx CQI tests**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0426 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Inc*

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

**R4-2318797 [NR\_newRAT-Perf] CR for 38.101-4 on correction of wrong table number (Rel-15, Cat F)**

*Type: CR For: Agreement  
 38.101-4 v15.19.0 CR-0429 rev Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318798 [NR\_newRAT-Perf] CR for 38.101-4 on correction of wrong table number (Rel-16, Cat A)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0430 rev Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318799 [NR\_newRAT-Perf] CR for 38.101-4 on correction of wrong table number (Rel-17, Cat A)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0431 rev Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318800 [NR\_newRAT-Perf] CR for 38.101-4 on correction of wrong table number (Rel-18, Cat A)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0432 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318941 [NR\_HST] HST-SFN and HST-DPS model clarification**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0433 rev Cat: F (Rel-16)  
  
 Source: Qualcomm Inc.*

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

**R4-2318942 [NR\_HST] HST-SFN and HST-DPS model clarification-R17mirror**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0434 rev Cat: A (Rel-17)  
  
 Source: Qualcomm, Inc.*

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

**R4-2318943 [NR\_HST] HST-SFN and HST-DPS model clarification-R18mirror**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0435 rev Cat: A (Rel-18)  
  
 Source: Qualcomm, Inc.*

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

**R4-2319123 [NR\_L1enh\_URLLC-Perf] Report quantity parameter setting for CQI reporting with 1Tx**

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

**Abstract:**

Discussion on the definition of the test parameter reportQuantity for CQI test with 1Tx.

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

**R4-2319124 [NR\_L1enh\_URLLC-Perf] CR to Report quantity for CQI Reporting tests with 1Tx**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0436 rev Cat: F (Rel-16)  
  
 Source: Anritsu Corporation*

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

**R4-2319125 [NR\_L1enh\_URLLC-Perf] CR to Report quantity for CQI Reporting tests with 1Tx**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0437 rev Cat: A (Rel-17)  
  
 Source: Anritsu Corporation*

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

**R4-2319126 [NR\_L1enh\_URLLC-Perf] CR to Report quantity for CQI Reporting tests with 1Tx**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0438 rev Cat: A (Rel-18)  
  
 Source: Anritsu Corporation*

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

**R4-2319261 Sidelink demodulation typo fixed**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0439 rev Cat: D (Rel-16)  
  
 Source: LG Electronics*

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

**R4-2319325 [NR\_newRAT-Perf, NR\_redcap-Perf] CR on 38.101-4 general applicablity of requirements (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0440 rev Cat: F (Rel-16)  
  
 Source: Samsung*

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

**R4-2319815 [NR\_IAB-Perf] CR for 38.176-1: Removal of Square Brackets in IAB-MT Performance Requirements (Rel-17, Cat F)**

*Type: CR For: Agreement  
 38.176-1 v17.6.0 CR-0034 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2319816 [NR\_IAB-Perf] CR for 38.176-1: Removal of Square Brackets in IAB-MT Performance Requirements (Rel-18, Cat A)**

*Type: CR For: Agreement  
 38.176-1 v18.2.0 CR-0035 rev Cat: A (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320201 Corrections on test parameters for PDSCH test**

*Type: CR For: Agreement  
 38.101-4 v15.19.0 CR-0447 rev Cat: F (Rel-15)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320202 CR on 38.101-4 Correction on "HARQ ACK/NACK bundling" for PDSCH test (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0448 rev Cat: A (Rel-16)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320203 CR on 38.101-4 Correction on "HARQ ACK/NACK bundling" for PDSCH test (Rel-17)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0449 rev Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320204 CR on 38.101-4 Correction on "HARQ ACK/NACK bundling" for PDSCH test (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0450 rev Cat: A (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320208 CR on 38.141: Correction on applicability rules for different bandwidth for PRACH with LRA=1151 and 571 (Rel-16)**

*Type: CR For: Agreement  
 38.141-1 v16.17.0 CR-0397 rev Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320209 CR on 38.141: Correction on applicability rules for different bandwidth for PRACH with LRA=1151 and 571 (Rel-17)**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0398 rev Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320210 CR on 38.141: Correction on applicability rules for different bandwidth for PRACH with LRA=1151 and 571 (Rel-18)**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0399 rev Cat: A (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320211 CR on 38.101-4 Correcting applicability for FR2 multi-slot repetition test case (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0453 rev Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320212 CR on 38.101-4 Correcting applicability for FR2 multi-slot repetition test case (Rel-17)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0454 rev Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320213 CR on 38.101-4 Correcting applicability for FR2 multi-slot repetition test case (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0455 rev Cat: A (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320655 [NR\_L1enh\_URLLC-Perf] CR to TS38.101-4 Corrections to CQI Reporting tests with 1TX (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0456 rev Cat: F (Rel-16)  
  
 Source: MediaTek inc.*

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

**R4-2320656 [NR\_newRAT-Perf] CR to TS38.101-4 Corrections to test parameters for CSI test cases (Rel-16)**

*Type: CR For: Agreement  
 38.101-4 v16.14.0 CR-0457 rev Cat: F (Rel-16)  
  
 Source: MediaTek inc.*

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

### 4.6 OTA and TRP/TRS test aspects

### 4.7 Rel-15/16 TEI

### 4.8 Moderator summary and conclusions (for Agenda 4)

## 5 Rel-17 maintenance for LTE and NR

**Guidance for maintenance agendas (AI 4, AI 5 and AI 6)**

The following guidance are provided for AI 4, AI5 and AI6:

- For maintenance agenda AI 4 (up to Rel-16), AI 5 (Rel-17) and AI 6 (Rel-18), formal CRs are expected and multiple formal CRs per company in the lowest agenda are allowed. For tracking the changes easily, it expected that one batch of CRs (Cat-F/A/…) will just cover a single topic/WI rather than multiple topics/WIs and Cat-F CR with corresponding Cat-A CRs needs be submitted under the same agenda.

- When submitting contributions to AI 4, AI 5 and AI 6, please add [WI\_code] in the beginning of titles for both discussion files and CRs to facilitate moderators and session chairs handling.

- When reserving the tdoc number, please use the correct WI code rather than simply using TEI and fill the column of “Related WIs” in your reservation spreadsheet. If you submit a CR with TEI as WI code, please inform session chair.

### 5.1 Rel-17 spectrum related WI maintenance

### 5.2 Rel-17 non-spectrum related WI maintenance

#### 5.2.1 UE RF requirements

#### 5.2.2 BS RF requirements and BS conformance testing

**R4-2318293 CR for TS 38.108, Correction on out-of-band emissions**

*Type: CR For: Agreement  
 38.108 v17.5.0 CR-0044 rev Cat: F (Rel-17)  
  
 Source: CATT*

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

**R4-2318294 CR for TS 38.108, Correction on out-of-band emissions**

*Type: CR For: Agreement  
 38.108 v18.0.0 CR-0045 rev Cat: A (Rel-18)  
  
 Source: CATT*

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

**R4-2318295 CR for TS 38.181, Correction on out-of-band emissions**

*Type: CR For: Agreement  
 38.181 v17.2.0 CR-0011 rev Cat: F (Rel-17)  
  
 Source: CATT*

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

**R4-2318296 CR for TR 38.863, Correction on interfering signal power for out-of-band blocking**

*Type: CR For: Agreement  
 38.863 v17.2.0 CR-0008 rev Cat: F (Rel-17)  
  
 Source: CATT*

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

**R4-2318297 Discussion on out-of-band emission and out-of-band blocking interfering signal power for FR1 NTN SAN**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2318306 CR for TR 38.863, Correction on Satellite and UE Antenna and beam forming pattern modelling**

*Type: CR For: Agreement  
 38.863 v17.2.0 CR-0009 rev Cat: F (Rel-17)  
  
 Source: CATT*

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

**R4-2318542 Correction to TR 38.852**

*Type: CR For: Agreement  
 38.852 v17.2.0 CR-0005 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Correction to section 9 Deployment aspects - coordinated deployment

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

**R4-2318543 Correction to TR 38.853**

*Type: CR For: Agreement  
 38.853 v17.2.0 CR-0005 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Correction to section 9 Deployment aspects: coordinated deployment.

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

**R4-2318562 Removal of RMR Wide Area BS type 1-C output power limits**

*Type: CR For: Agreement  
 38.104 v17.11.0 CR-0527 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Removal of RMR Wide Area BS type 1-C output power limits

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

**R4-2318563 Removal of RMR Wide Area BS type 1-C output power limits**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0390 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Removal of RMR Wide Area BS type 1-C output power limits

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

**R4-2319308 [NR\_cov\_enh-Perf] CR for configuration of FR1 PUSCH TBoMS demodulation requirement**

*Type: CR For: Agreement  
 38.141-2 v17.11.0 CR-0554 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

correction on aTDW value for FDD

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

**R4-2319309 [NR\_cov\_enh-Perf] CR for TS38.141-2 correction on configuration in FDD (Rel-18 CAT A)**

*Type: CR For: Agreement  
 38.141-2 v18.3.0 CR-0555 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

correction on aTDW value for FDD

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

**R4-2320159 CR to 38.141-2: Measurement uncertainty for OBW in FR2-2 (Rel-17)**

*Type: CR For: Agreement  
 38.141-2 v17.11.0 CR-0559 rev Cat: F (Rel-17)  
  
 Source: NEC*

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

**R4-2320160 CR to 38.141-2: Measurement uncertainty for OBW in FR2-2 (Rel-18)**

*Type: CR For: Agreement  
 38.141-2 v18.3.0 CR-0560 rev Cat: A (Rel-18)  
  
 Source: NEC*

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

**R4-2320161 Discussion on terminologies “transmitter OFF state” and “transmitter ON state” in the repeater specifications**

*Type: discussion For: Discussion  
 Source: NEC*

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

**R4-2320162 CR to 38.106: Correction of terminologies for NR repeaters (Rel-17)**

*Type: CR For: Agreement  
 38.106 v17.6.0 CR-0043 rev Cat: F (Rel-17)  
  
 Source: NEC*

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

**R4-2320163 CR to 38.106: Correction of terminologies for NR repeaters (Rel-18)**

*Type: CR For: Agreement  
 38.106 v18.2.0 CR-0044 rev Cat: A (Rel-18)  
  
 Source: NEC*

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

**R4-2320164 CR to 38.115-1: Correction of terminologies for NR repeaters (Rel-17)**

*Type: CR For: Agreement  
 38.115-1 v17.3.0 CR-0021 rev Cat: F (Rel-17)  
  
 Source: NEC*

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

**R4-2320165 CR to 38.115-1: Correction of terminologies for NR repeaters (Rel-18)**

*Type: CR For: Agreement  
 38.115-1 v18.2.0 CR-0022 rev Cat: A (Rel-18)  
  
 Source: NEC*

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

**R4-2320166 CR to 38.115-2: Correction of terminologies for NR repeaters**

*Type: CR For: Agreement  
 38.115-2 v17.3.0 CR-0010 rev Cat: F (Rel-17)  
  
 Source: NEC*

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

**R4-2320263 CR to TS 38.106 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.106 v17.6.0 CR-0046 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320264 CR to TS 38.106 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.106 v18.2.0 CR-0047 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320265 CR to TS 38.114 with update to manufacturer declaration and references**

*Type: CR For: Agreement  
 38.114 v17.3.0 CR-0008 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320266 CR to TS 38.115-1 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.115-1 v17.3.0 CR-0023 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320267 CR to TS 38.115-1 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.115-1 v18.2.0 CR-0024 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320268 CR to TS 38.174 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0079 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320269 CR to TS 38.174 with correction of co-location requirements**

*Type: CR For: Agreement  
 38.174 v17.5.0 CR-0080 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320270 CR to TS 38.176-1 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.176-1 v18.2.0 CR-0036 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320271 CR to TS 38.176-1 with correction of co-location requirements**

*Type: CR For: Agreement  
 38.176-1 v17.6.0 CR-0037 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320272 CR to TS 38.176-2 with correction of co-existence and co-location requirements**

*Type: CR For: Agreement  
 38.176-2 v18.2.0 CR-0039 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320273 CR to TS 38.176-2 with correction of co-existence requirements**

*Type: CR For: Agreement  
 38.176-2 v17.6.0 CR-0040 rev Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320532 CR to update FR2 range in IAB specification**

*Type: CR For: Agreement  
 38.174 v17.5.0 CR-0086 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to update FR2 range in IAB specification

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

**R4-2320533 CR to update FR2 range in IAB specification**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0087 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

CR to update FR2 range in IAB specification

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

**R4-2320534 CR to update FR2 range in IAB specification**

*Type: CR For: Agreement  
 38.176-1 v17.6.0 CR-0039 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to update FR2 range in IAB specification

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

**R4-2320535 CR to update FR2 range in IAB specification**

*Type: CR For: Agreement  
 38.176-1 v18.2.0 CR-0040 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

CR to update FR2 range in IAB specification

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

**R4-2320536 CR to update FR2 range in IAB specification**

*Type: CR For: Agreement  
 38.176-2 v17.6.0 CR-0042 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

CR to update FR2 range in IAB specification

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

**R4-2320537 CR to update FR2 range in IAB specification**

*Type: CR For: Agreement  
 38.176-2 v18.2.0 CR-0043 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

CR to update FR2 range in IAB specification

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

**R4-2320705 Correction to TR 38.852**

*Type: CR For: Agreement  
 38.852 v17.2.0 CR-0006 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Correction to section 9 Deployment aspects - remove uncoordinated deployment.

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

**R4-2320706 Correction to TR 38.853**

*Type: CR For: Agreement  
 38.853 v17.2.0 CR-0006 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Correction to section 9 Deployment aspects: remove uncoordinated deployment.

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

**R4-2320710 Removal of RMR Wide Area BS type 1-C rated output power limits**

*Type: CR For: Agreement  
 38.104 v17.11.0 CR-0545 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Removal of RMR Wide area BS type 1-C output power limits

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

**R4-2320712 Removal of RMR Wide Area BS type 1-C rated output power limits**

*Type: CR For: Agreement  
 38.141-1 v17.11.0 CR-0401 rev Cat: F (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Removal of RMR Wide Area BS type 1-C rated output power limits

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

#### 5.2.3 RRM requirements

#### 5.2.4 Demodulation and CSI requirements

**R4-2318740 CR to 38.101-4 Correction to report quantity for 1Tx CQI tests (Rel 17 - Cat A)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0427 rev Cat: A (Rel-17)  
  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2319220 CR to 38.101-5: Correction on the reference measurement channel for NTN PDSCH requirement**

*Type: CR For: Agreement  
 38.101-5 v17.5.0 CR-0043 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Correct FRC for NTN PDSCH requirements

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

**R4-2319221 CR to 38.101-5: Correction on the reference measurement channel for NTN PDSCH requirement**

*Type: CR For: Agreement  
 38.101-5 v18.3.0 CR-0044 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Correct FRC for NTN PDSCH requirements

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

**R4-2319326 [NR\_newRAT-Perf, NR\_redcap-Perf] CR on 38.101-4 general applicablity of requirements (Rel-17)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0441 rev Cat: A (Rel-17)  
  
 Source: Samsung*

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

**R4-2319327 [NR\_newRAT-Perf, NR\_redcap-Perf] CR on 38.101-4 general applicablity of requirements (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0442 rev Cat: A (Rel-18)  
  
 Source: Samsung*

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

**R4-2319328 [NR\_ext\_to\_71GHz-Perf] CR on 38.101-4 general applicablity of requirements (Rel-17)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0443 rev Cat: F (Rel-17)  
  
 Source: Samsung*

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

**R4-2319329 [NR\_ext\_to\_71GHz-Perf] CR on 38.101-4 general applicablity of requirements (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0444 rev Cat: A (Rel-18)  
  
 Source: Samsung*

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

**R4-2319708 [NR\_ext\_to\_71GHz-Perf] CR to 38.141-2: 71 GHz Extension BS performance test PRACH offset correction R17**

*Type: CR For: Agreement  
 38.141-2 v17.11.0 CR-0556 rev Cat: F (Rel-17)  
  
 Source: Keysight Technologies UK Ltd*

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

**R4-2319709 [NR\_ext\_to\_71GHz-Perf] CR to 38.141-2: 71 GHz Extension BS performance test PRACH offset correction R18**

*Type: CR For: Agreement  
 38.141-2 v18.3.0 CR-0557 rev Cat: A (Rel-18)  
  
 Source: Keysight Technologies UK Ltd*

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

**R4-2319737 Correction of CSI FR1 RMC table foramt for CQI table 1**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0445 rev Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This CR corrects the CSI RMC table.

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

**R4-2319738 Correction of CSI FR1 RMC table foramt for CQI table 1**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0446 rev Cat: A (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This CR corrects the CSI RMC table.

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

**R4-2320205 Maintenance on test parameters on FR2-2 PDSCH tests**

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

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

**R4-2320206 CR on 38.101-4 Correction on test paramters for FR2-2 PDSCH test with 480kHz**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0451 rev Cat: F (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320207 CR on 38.101-4 Correction on some parameters for FR2-2 UE test (Rel-18)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0452 rev Cat: A (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320785 CR to align Rank on TDD Redcap CQI Tests - [Rel.17 Cat.F]**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0458 rev Cat: F (Rel-17)  
  
 Source: Qualcomm Inc.*

**Abstract:**

Note: The change request number on CR cover for TDoc R4-2320785 does not have correct value: 0458.

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

**R4-2320786 CR to align Rank on TDD Redcap CQI Tests - [Rel.18 Cat.A]**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0459 rev Cat: A (Rel-18)  
  
 Source: Qualcomm Inc.*

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

**R4-2320878 [NR\_NTN\_solutions-Perf] CR to 38.101-5 Clarify test condition for NR NTN**

*Type: CR For: Agreement  
 38.101-5 v17.5.0 CR-0050 rev Cat: F (Rel-17)  
  
 Source: Qualcomm Inc*

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

**R4-2320882 [NR\_HST\_FR1\_enh] HST-DPS model clarification (CA)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0461 rev Cat: F (Rel-17)  
  
 Source: QUALCOMM Europe Inc. - Spain*

**Abstract:**

Note: The release for the reserved CR is 3GU but the CR coversheet is Rel-16.

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

**R4-2320883 [NR\_HST\_FR1\_enh] HST-DPS model clarification (CA)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0462 rev Cat: A (Rel-18)  
  
 Source: QUALCOMM Europe Inc. - Spain*

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

**R4-2320890 [LTE\_NBIoT\_eMTC\_NTN\_req] CR to 36.102 Clarify test condition for IoT NTN**

*Type: CR For: Agreement  
 36.102 v18.3.0 CR-0026 rev Cat: F (Rel-18)  
  
 Source: Qualcomm Inc*

**Abstract:**

Note: This contribution will be treated under [109][332] IoT\_NTN\_Demod.

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

**R4-2320950 [NR\_HST\_FR1\_enh] HST-DPS model clarification (CA)**

*Type: CR For: Agreement  
 38.101-4 v17.10.0 CR-0463 rev Cat: F (Rel-17)  
  
 Source: Qualcomm Inc.*

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

#### 5.2.5 OTA and TRP/TRS test aspects

**R4-2318978 CR to TS 38.161 on Applicability rules and test configurations**

*Type: CR For: Agreement  
 38.151 v17.5.0 CR-0021 rev Cat: F (Rel-17)  
  
 Source: vivo*

**Abstract:**

Note: This contribution will be treated under [109][336] NR\_MIMO\_OTA\_enh

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

**R4-2319271 CR on introduction of applicability rules for MIMO OTA requirements**

*Type: CR For: Agreement  
 38.151 v17.5.0 CR-0022 rev Cat: F (Rel-17)  
  
 Source: Samsung*

**Abstract:**

Note: This contribution will be treated under [109][336] NR\_MIMO\_OTA\_enh.

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

**R4-2320596 CR to TS 38.151 on FR2 channel model validation pass/fail limits**

*Type: CR For: Agreement  
 38.151 v17.5.0 CR-0023 rev Cat: F (Rel-17)  
  
 Source: CAICT*

**Abstract:**

Note: This contribution will be treated under [109][336] NR\_MIMO\_OTA\_enh

.

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

**R4-2320597 On MIMO OTA Doppler validation pass fail limits**

*Type: other For: Approval  
 Source: CAICT*

**Abstract:**

Note: This contribution will be treated under [109][336] NR\_MIMO\_OTA\_enh.

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

### 5.3 Rel-17 TEI

### 5.4 Moderator summary and conclusions (for Agenda 5)

**R4-2318207 Topic summary for [109][315] Demod\_Maintenance**

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

**Abstract:**

[109][300] BDaT Session AI 4.5, 5.2.4

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

**R4-2318225 Topic summary for [109][333] OTA\_Maintenance (placeholder)**

*Type: other For: Information  
 Source: Moderator (Keysight)*

**Abstract:**

[109][300] BDaT Session AI 4.6, 5.2.5

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

## 6 Rel-18 maintenance for LTE and NR

**Guidance for maintenance agendas (AI 4, AI 5 and AI 6)**

The following guidance are provided for AI 4, AI5 and AI6:

- For maintenance agenda AI 4 (up to Rel-16), AI 5 (Rel-17) and AI 6 (Rel-18), formal CRs are expected and multiple formal CRs per company in the lowest agenda are allowed. For tracking the changes easily, it expected that one batch of CRs (Cat-F/A/…) will just cover a single topic/WI rather than multiple topics/WIs and Cat-F CR with corresponding Cat-A CRs needs be submitted under the same agenda.

- When submitting contributions to AI 4, AI 5 and AI 6, please add [WI\_code] in the beginning of titles for both discussion files and CRs to facilitate moderators and session chairs handling.

- When reserving the tdoc number, please use the correct WI code rather than simply using TEI and fill the column of “Related WIs” in your reservation spreadsheet. If you submit a CR with TEI as WI code, please inform session chair.

**R4-2320867 CR to 38.101-4 Correction to report quantity for 1Tx CQI tests (Rel 18 - Cat A)**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0460 rev Cat: A (Rel-18)  
  
 Source: Qualcomm India Pvt Ltd*

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

### 6.1 Rel-18 spectrum related WI maintenance

### 6.2 Rel-18 non-spectrum related WI maintenance

#### 6.2.1 UE RF requirements

#### 6.2.2 BS RF requirements

#### 6.2.3 RRM requirements

#### 6.2.4 Other dedicated Rel-18 Wis

##### 6.2.4.1 NB-IoT/eMTC core & perf. requirements for NTN

###### 6.2.4.1.1 SAN RF requirement and conformance testing

**R4-2318443 CR on Unwanted emission requirement for IoT NTN**

*Type: CR For: Agreement  
 36.181 v18.1.0 CR-0008 rev Cat: F (Rel-18)  
  
 Source: China Telecom, NEC*

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

**R4-2320158 CR to 36.108: Out-of-band emissions requirements**

*Type: CR For: Agreement  
 36.108 v18.3.0 CR-0017 rev Cat: F (Rel-18)  
  
 Source: NEC, China Telecom*

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

###### 6.2.4.1.2 UE RF requirement

###### 6.2.4.1.3 RRM requirement

###### 6.2.4.1.4 Demodulation requirements

**R4-2318060 CR on TS 36.181 for SAN Demodulation (Rel 18, Cat F)**

*Type: CR For: Agreement  
 36.181 v18.1.0 CR-0007 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

removal of []

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

**R4-2318080 CR to TS36.102 Addition of downlink physical channels for connection set-up for Cat NB1 and NB2**

*Type: CR For: Agreement  
 36.102 v18.3.0 CR-0020 rev Cat: F (Rel-18)  
  
 Source: MediaTek inc.*

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

**R4-2318509 CR on TS 36.181 for SAN Demodulation (Rel 18, Cat F)**

*Type: CR For: Agreement  
 36.181 v18.1.0 CR-0009 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Updates of SNR values following alignment

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

**R4-2319735 Completion of eMTC SAN demodulation requirements**

*Type: CR For: Agreement  
 36.108 v18.3.0 CR-0015 rev Cat: F (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This CR cleanup the values to finalized the SAN demodulatation requirements for IoT-NTN.

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

**R4-2319736 Correction of FRC for eMTC UE demodulation requirements**

*Type: CR For: Agreement  
 36.102 v18.3.0 CR-0024 rev Cat: F (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This CR corrects the FRC used for Cat-M1 UE demodulatation requirements for IoT-NTN.

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

**R4-2319848 Simulation results for eMTC and NB-IoT over NTN**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319849 [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]CR on SAN demodulation requirements for NB-IoT over NTN**

*Type: CR For: Agreement  
 36.108 v18.3.0 CR-0016 rev Cat: F (Rel-18)  
  
 Source: Samsung*

**Abstract:**

Note: The CR coversheet has the incorrect CR number -0016

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

**R4-2320227 [LTE\_NBIOT\_eMTC\_NTN\_req-Perf] CR on IOT NTN demodulation performance requirements (TS36.181, Rel-18)**

*Type: CR For: Agreement  
 36.181 v18.1.0 CR-0010 rev Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2320228 Simulation results on SAN demodulation requirements for LTE NTN IOT**

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

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

**R4-2320654 CR to TS36.102 Addition of downlink physical channels for connection set-up for Cat NB1 and NB2**

*Type: CR For: Agreement  
 36.102 v18.3.0 CR-0025 rev Cat: F (Rel-18)  
  
 Source: MediaTek*

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

##### 6.2.4.2 In-Device Co-existence (IDC) enhancements for NR and MR-DC

### 6.3 Rel-18 TEI

### 6.4 Moderator summary and conclusions

**R4-2318193 Topic summary for [109][301] BSRF\_Maintenance**

*Type: other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

[109][300] BDaT Session AI 4.2, 5.2.2, 6.2.2

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

**R4-2318206 Topic summary for [109][314] IoT\_NTN\_SANRF**

*Type: other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

[109][300] BDaT Session AI 6.2.4.1.1, 9.6.3

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

## 7 Rel-18 on-going spectrum related WIs for NR

## 8 Rel-18 on-going non-spectrum related work items and study items for NR

### 8.1 Study on simplification of band combination specification for NR and LTE

### 8.2 Study on NR FR2 OTA testing enhancements

#### 8.2.1 General aspects

**R4-2319922 TP to TR38.871 for test procedure of UE RF multi-Rx**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: OPPO*

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

**R4-2319923 TP to TR 38.871 for UE coordinate system**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: OPPO*

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

**R4-2320390 TP to TR 38.871 on draft summary and editorial changes**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

**R4-2320391 3GPP TR 38.871 v0.6.0**

*Type: draft TR For: Agreement  
 38.871 v0.6.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

**R4-2320408 TP on TR 38.871 on RRM Measurement uncertainty**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Capture agreed MU assessment as the baseline in RAN4#108bis

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

**R4-2320409 TP on TR 38.871 for RRM test method**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Huawei,HiSilicon*

**Abstract:**

Capture an example of Time and Frequency multiplexed downlink transmission for Category 2 scenario with 3 probes

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

#### 8.2.2 Test methods for RF requirements

**R4-2318838 On Multi-RX UE RF Testing and Positioning Topics**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

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

**R4-2318986 Discussion on FR2 multi-Rx RF test method**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2319268 Discussion on 2AoA spherical coverage measurement grid and test procedure**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319917 Discussion on the re-positioning for multi-Rx**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2319918 Further discussion on Multi-Rx test procedure**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2320382 Views on RF test method for FR2 multi-Rx UE**

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

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

**R4-2320386 TP to TR 38.871 on step size of measurement grid**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

**R4-2320411 Discussion on Test method for UE RF**

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

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

#### 8.2.3 Test methods for RRM requirements

**R4-2320383 Views on RRM test method for FR2 multi-Rx UE**

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

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

**R4-2320387 TP to TR 38.871 on RRM test method**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

**R4-2320410 Discussion on Test method for UE RRM**

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

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

#### 8.2.4 Test methods for Demodulation requirements

**R4-2318837 On Multi-RX UE Demod Isolation MU**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

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

**R4-2320384 Views on demodulation test method for FR2 multi-Rx UE**

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

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

**R4-2320388 TP to TR 38.871 on Demodulation test method**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

#### 8.2.5 Test uncertainty assessments

**R4-2318987 Preliminary MU assessment for multi-Rx RF testing**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2320385 MU assessment for FR2 multi-Rx UE test methodology**

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

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

**R4-2320389 TP to TR 38.871 on MU assessment**

*Type: pCR For: Approval  
 38.871 v0.5.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

#### 8.2.6 Moderator summary and conclusions

**R4-2318226 Topic summary for [109][334] FS\_NR\_FR2\_OTA\_enh**

*Type: other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

[109][300] BDaT Session AI 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5

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

### 8.3 Further RF requirements enhancement for NR and EN-DC in FR1

#### 8.3.1 UE RF requirements

#### 8.3.2 RRM performance requirements

##### 8.3.2.1 RLM test cases to support 8Rx

#### 8.3.3 Demodulation and CSI requirements

##### 8.3.3.1 8Rx UE demodulation and CSI

**R4-2319705 8Rx for CPE/FWA/vehicle/industrial devices: Demodulation requirements**

*Type: discussion For: Discussion  
 Source: QUALCOMM Europe Inc. - Spain*

**Abstract:**

8Rx single carrier PDSCH simulation results, a proposal on margin enhancment.

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

**R4-2320412 8Rx for CPE/FWA/vehicle/industrial devices: Demodulation requirements**

*Type: discussion For: Discussion  
 Source: QUALCOMM Europe Inc. - Spain*

**Abstract:**

Updated proposals of span and margin for 8Rx requirements.

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

###### 8.3.3.1.1 General aspects

**R4-2318043 Discussion on 8Rx general demodulation aspects**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document extends the discussion on the 8Rx UE demodulation and CSI requirements

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

**R4-2318049 Introduction of 8Rx Applicability Rule**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Inclusion of 8Rx Applicability Rule

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

**R4-2318671 Further Discussion on General Aspects of 8Rx Requirements in FR1**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2319227 Left open issues on general aspects for 8Rx in FR1**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the applicability rule for 8Rx.

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

**R4-2319332 discussion on 8Rx general aspects requirements**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319534 Discussion on 8Rx UE demodulation requirements for CA**

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

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

###### 8.3.3.1.2 PDSCH requirements

**R4-2318044 Discussion on PDSCH Demodulation Requirements for 8Rx**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia’s views on the open issues related to the 8Rx UE PDSCH demodulation.

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

**R4-2318045 Supporting Simulation results for PDSCH demodulation for 8Rx**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution, we provide the simulation results for 8 Rx PDSCH UE demodulation requirements. Discussion, observations, and proposals will be made in our companion Tdoc.

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

**R4-2318050 Introduction of 8Rx CA Performance Requirements**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduction of 8Rx CA Performance Requirements

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

**R4-2318663 Discussion on PDSCH requirements for 8Rx UE**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318668 Draft CR to 38.101-4 Reference measurement channels for 8Rx CA PDSCH requirements (FDD, 8 layers)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: MediaTek inc.*

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

**R4-2318672 On the PDSCH Demodulation Requirements for 8Rx UEs in FR1**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318675 Summary of Simulation Results for 8Rx Demodulation Requirements**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318676 draftCR on FRC for 8Rx UEs TDD 2 layers in CBW 5MHz to 30MHz**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Apple*

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

**R4-2318677 draftCR on FRC for 8Rx UEs TDD 2 layers in CBW 40MHz to100MHz**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Apple*

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

**R4-2319226 Simulation results collection for 8 Rx UE demodulation requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution collects the simulation results from all interested companies.

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

**R4-2319228 Draft CR to 38.101-4 for FRC for FDD 8 layers (30MHz,35MHz,40MHz, 45MHz, 50MHz)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR provides new FRC for FDD 8 layers

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

**R4-2319229 Draft CR to 38.101-4 for FRC for TDD 8 layers (5MHz,10MHz,15MHz,20MHz,25MHz,30MHz)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR provides new FRC for TDD 8 layers

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

**R4-2319230 Draft CR to 38.101-4 for FRC for FDD 2 layers (5MHz, 10MHz, 15MHz,20MHz,25MHz)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR provides new FRC for FDD 2 layers

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

**R4-2319330 Draft CR on 8Rx PDSCH demodulation requirements**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Samsung*

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

**R4-2319331 Draft CR on FRC for TDD 8 layers (40-100MHz)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Samsung*

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

**R4-2319333 discussion and simulation results on 8Rx PDSCH requirements**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319388 Draft CR on 8Rx PDSCH CA requirements FRC for FDD 2 layers**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: China Telecom*

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

**R4-2319389 Discussion on PDSCH CA requirements for UE with 8Rx: Simulation results**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2319390 Discussion on PDSCH CA requirements for UE with 8Rx**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2319535 Simulation results for PDSCH demodulation requirements for 8Rx CA**

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

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

**R4-2320189 Discussions on remain issues on 8Rx PDSCH requirements**

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

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

**R4-2320190 Simulation results on 8Rx PDSCH requirements**

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

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

**R4-2320191 CR on 38.101-4 Introduction of applicability rules for 8Rx CA requirements**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

###### 8.3.3.1.3 SDR requirements

**R4-2318046 Discussion on SDR Demodulation Requirements for 8Rx**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia’s views on the open issues related to the 8Rx UE SDR demodulation.

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

**R4-2318673 Discussion on SDR Requirements for 8Rx Ues**

*Type: discussion For: Discussion  
 Source: Apple*

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

###### 8.3.3.1.4 CQI reporting requirements

**R4-2318047 Discussion on CQI Demodulation Requirements for 8Rx**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we present Nokia’s view on the impact to demodulation requirements.

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

**R4-2318048 Supporting Simulation results for CQI demodulation for 8Rx**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper we provide CQI simulation results to support the 8Rx CQI discussions.

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

**R4-2318674 Discussion on CSI Requirements for 8Rx Ues**

*Type: discussion For: Discussion  
 Source: Apple*

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

##### 8.3.3.2 4Tx BS demodulation

**R4-2318051 Disucssion on 4Tx Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we provide simulation results for 4Tx BS demodulation, based upon the parameters agreed at previous RAN4 meetings.

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

**R4-2319317 Big CR for 38.104 on 4Tx PUSCH demodulation requirements**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0537 rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Big CR based on big draftCR after 108bis

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

**R4-2319528 CR to TS 38.141-1 for supporting of 4Tx in R18**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0392 rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319710 Correction on draft BtoigCR 38.141-1 NR\_ENDC\_RF\_FR1\_enh2-Perf 4Tx demod**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: (Rel-18)  
  
 Source: Keysight Technologies UK Ltd*

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

**R4-2319812 CR to TS 38.141-1 for supporting of 4Tx in R18**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0396 rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319850 Big CR for TS 38.141-2 on 4Tx demodulation requirements**

*Type: CR For: Agreement  
 38.141-2 v18.3.0 CR-0558 rev Cat: B (Rel-18)  
  
 Source: Samsung*

**Abstract:**

Note: The CR coversheet is missing CR number value 0558.

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

**R4-2320157 Draft CR to TS 38.141-1: FRC table for 4Tx PUSCH demodulation requirement**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: F (Rel-18)  
  
 Source: NEC*

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

#### 8.3.4 Moderator summary and conclusions

**R4-2318208 Topic summary for [109][316] RF\_FR1\_enh2\_Demod**

*Type: other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

[109][300] BDaT Session AI 8.3.3.1.1, 8.3.3.1.2, 8.3.3.1.3, 8.3.3.1.4, 8.3.3.2

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

### 8.4 NR Channel raster enhancement

### 8.5 Low NR band 4Rx for handheld UE and 3Tx for inter-band UL CA and EN-DC

### 8.6 NR RF requirements enhancement for FR2, Phase 3

#### 8.6.1 General aspects (TR/big CR)

#### 8.6.2 UL 256QAM (resubmitted CR)

#### 8.6.3 Beam correspondence requirements for RRC\_INACTIVE and initial access

#### 8.6.4 BS demodulation requirements

##### 8.6.4.1 UL 256QAM performance requirements

**R4-2318052 Discussion on UL 256 QAM BS Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we present Nokia’s view on the open issues of 256QAM UL demodulation for discussion at RAN4#109.

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

**R4-2318053 Supporting Simulations for 256QAM UL Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we present Nokia’s simulation results for 256QAM UL demodulation.

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

**R4-2318233 Introduction of 256 QAM PUSCH Requirements to TS 38.104**

*Type: draftCR For: Endorsement  
 38.104 v18.3.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduction of 256 QAM PUSCH Requirements to TS 38.104

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

**R4-2318877 Discussion on BS PUSCH demodulation performance for 256 QAM**

*Type: discussion For: Discussion  
 Source: Xiaomi*

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

**R4-2319318 Discussion FR2-1 PUSCH 256QAM demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Remaining configurations for PUSCH 256QAM equirements in FR2-1

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

**R4-2319319 Simulation results for FR2 PUSCH 256QAM requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

Simulation results with impairments for FR2 PUSCH 256QAM

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

**R4-2319320 [NR\_RF\_FR2\_req\_Ph3-Perf] Draft CR for 38.141-2 FR2-1 PUSCH 256QAM requirements**

*Type: draftCR For: Endorsement  
 38.141-2 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Draft CR for 38.141-2 FR2-1 PUSCH 256QAM requirements

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

**R4-2319526 Draft CR to 38.104 FRC for FR2-1 UL 256QAM**

*Type: draftCR For: Endorsement  
 38.104 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319527 Draft CR to 38.141-2 FRC for FR2-1 UL 256QAM**

*Type: draftCR For: Endorsement  
 38.141-2 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319529 Discussion on demodulation for FR2-1 UL 256QAM**

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

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

**R4-2319530 Simulation results for FR2-1 UL 256QAM**

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

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

**R4-2319707 UL256QAM demod SNR limit and test feasibility**

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

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

**R4-2319842 Discussion and simulation results on BS demodulation requirements for FR2 256QAM**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320214 [NR\_RF\_FR2\_req\_Ph3-Perf] Draft CR on introducing propagation condition for FR2 UL256QAM demodulation performance requirements (TS38.104, Rel-18)**

*Type: draftCR For: Endorsement  
 38.104 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320215 Discussion on FR2 UL 256QAM performance requirements**

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

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

**R4-2320216 Simulation results on FR2 UL 256QAM performance requirements**

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

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

**R4-2320217 Simulation summary for 256 QAM UL BS Demodulation**

*Type: other For: Information  
 Source: Huawei ,HiSilicon, Nokia, Nokia Shanghai Bell, Ericsson, Samsung, NTT Docomo, Xiaomi, ZTE*

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

#### 8.6.5 Moderator summary and conclusions

**R4-2318209 Topic summary for [109][317] NR\_RF\_FR2\_req\_Ph3\_Demod**

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

**Abstract:**

[109][300] BDaT Session AI 8.6.4.1

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

### 8.7 Requirement for NR FR2 multi-Rx chain DL reception

#### 8.7.1 UE RF requirements for simultaneous DL reception with up to 4 layer MIMO

#### 8.7.2 RRM core requirements for simultaneous DL reception from different directions

#### 8.7.3 RRM performance requirements

#### 8.7.4 Demodulation performance and CSI requirements

**R4-2318569 Summary of simultion results for Multi-RX demod and CSI**

*Type: discussion For: Information  
 Source: Apple*

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

**R4-2318733 Simulation results summary for FR2 multi-Rx performance requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2318767 Draft CR to include the FR2 multi-rx correlation model in the specification**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2321016 Draft Big CR on UE demodulation and CSI performance requirements for FR2 multi-Rx**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm India Pvt Ltd*

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

##### 8.7.4.1 General aspects

**R4-2318549 Discussion on general aspects of FR2 multiRX DL**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318570 On General aspects for Multi-RX in FR2 requirements**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318730 Views on General Aspects for FR2 Multi-Rx Performance Requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2318790 On MultiRx Demodulation performance and CSI requirements - General aspects**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's view on the open issues with relation to the general aspects for MultiRx Demodulation performance.

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

**R4-2320233 Discussion on general issues for UE demodulation requirements for NR FR2 multi-Rx chain DL reception**

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

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

##### 8.7.4.2 PDSCH requirements

**R4-2318550 Discussion on PDSCH requirements of FR2 multiRX DL**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318551 Simulation results of PDSCH requirements of FR2 multiRX DL**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318571 Simulation results for PDSCH with multi-RX in FR2**

*Type: discussion For: Information  
 Source: Apple*

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

**R4-2318572 DraftCR on PDSCH demod requirements for mDCI fully-overlapping with multi-RX in FR2**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Apple*

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

**R4-2318573 On PDSCH demod requirements with multi-RX in FR2**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318731 Views on PDSCH Aspects for FR2 Multi-Rx Performance Requirements**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2318732 Simulation Results on PDSCH Performance Requirements for FR2 Multi-Rx**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2318791 On MultiRx Demodulation performance and CSI requirements - PDSCH**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's view on the open issues with relation definition of PDSCH requirements for MultiRx Demodulation performance.

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

**R4-2318792 On MultiRx Demodulation performance and CSI requirements - Simulation Results**

*Type: discussion For: Information  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's simulation results for MultiRx

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

**R4-2318794 DraftCR on Minimum requirements and Reference Channel for mDCI non-overlapping**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

DraftCR for introduction of minimum requiremenst and Reference Channel for mDCI non-overlappping.

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

**R4-2319743 PDSCH demodulation requirements for FR2 UE multi-Rx reception**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issue on UE demodulation requirements for FR2 Multi-Rx reception.

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

**R4-2319744 Simulation results for FR2 UE multi-Rx reception**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issue on UE demodulation requirements for FR2 Multi-Rx reception.

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

**R4-2320235 Draft CR on Minimum requirements and FRC definition for sDCI SDM (TS38.101-4, Rel-18)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

##### 8.7.4.3 PMI reporting requirements

**R4-2318552 Discussion on PMI requirements of FR2 multiRX DL**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318553 Simulation results of PMI requirements of FR2 multiRX DL**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318554 Draft CR to 38.101-4 PMI requirements of FR2 multiRX DL**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: MediaTek inc.*

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

**R4-2318555 Draft CR to 38.101-4 PMI reference measurement channel of FR2 multiRX DL**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: MediaTek inc.*

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

**R4-2318574 On PMI reporting requirements with multi-RX in FR2**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318793 On MultiRx Demodulation performance and CSI requirements - PMI**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's view on the open issues with relation definition of PMI requirements for MultiRx Demodulation performance.

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

**R4-2319745 PMI reporting requirements for FR2 UE multi-Rx reception**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issue on PMI reporting requirements for FR2 Multi-Rx reception.

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

**R4-2320234 Discussion on UE CSI reporting requirements for NR FR2 multi-Rx chain DL reception**

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

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

#### 8.7.5 Moderator summary and conclusions

**R4-2318136 Topic summary for [109][130] FR2\_multiRx\_UERF\_part1**

*Type: other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

[109][100] Main Session AI 8.7.1

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

**R4-2318210 Topic summary for [109][318] NR\_FR2\_multiRX\_DL\_Demod**

*Type: other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

[109][300] BDaT Session AI 8.7.4.1, 8.7.4.2, 8.7.4.3

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

### 8.8 Even Further RRM enhancement for NR and MR-DC

### 8.9 Further enhancements on NR and MR-DC measurement gaps and measurements without gaps

### 8.10 Completion of specification support for bandwidth part operation without restriction in NR

### 8.11 Support of intra-band non-collocated EN-DC/NR-CA deployment

#### 8.11.1 UE RF architecture and RF requirements

#### 8.11.2 RRM Core requirement

#### 8.11.3 RRM performance requirements

#### 8.11.4 Demodulation performance requirements

**R4-2318350 Discussion on UE Demodulation for non-colocated FR1 intra-band NR-CA**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318351 Simulations for UE Demodulation for non-colocated FR1 intra-band NR-CA**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318352 BigCR for 38.101-4: Type 2 UE NonCol NR-CA PDSCH demodulation requirements**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0425 rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2318556 Discussion on Intra-Band Non-Collocated NR-CA**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318557 Simulation results of Intra-Band Non-Collocated NR-CA**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318679 PDSCH Demodulation Requirements for Type-2 UEs in Intra-band Non-contiguous Non-collocated NR Carrier Aggregation**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2319525 Draft CR to 38.101-4 demodulation requirements for non-collocated NR-CA**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319531 Discussion on demodulation requirement for intra-band non-collocated NR-CA**

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

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

**R4-2319532 Simulation results for intra-band non-collocated NR-CA**

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

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

**R4-2319739 UE demodulation requirements for non-colocated NR-CA deployment scenario**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation requirements for non-colocated NR-CA deployment scenario.

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

**R4-2319740 Summary of simulation results for UE demodulation requirements for non-colocated NR-CA deployment scenario**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This spreadsheet summarizes the simulation results for UE demodulation requirements for non-colocated NR-CA deployment scenario.

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

**R4-2320192 Discussions on demodulation requirements for intra-band EN-DC/NR-CA**

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

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

**R4-2320193 Simulation results on demodulation requirements for intra-band EN-DC/NR-CA**

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

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

**R4-2320194 Draft CR on introduction of performance requirements for intra-band EN-DC/NR-CA**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320795 Discussion paper on demod tests for Intraband noncol NR-CA**

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

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

**R4-2320796 Simulation results for Intraband noncol NR-CA**

*Type: other For: Information  
 Source: Qualcomm Inc.*

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

**R4-2320797 draftCR on FRC for Non-colocated Intraband CA**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Inc.*

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

#### 8.11.5 Moderator summary and conclusions

**R4-2318211 Topic summary for [109][319] NonCol\_intraB\_ENDC\_NR\_CA\_Demod**

*Type: other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

[109][300] BDaT Session AI 8.11.4

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

### 8.12 Enhanced NR support for high speed train scenario in frequency range 2

#### 8.12.1 RRM core requirement maintenance

#### 8.12.2 RRM performance requirements

#### 8.12.3 Demodulation performance requirements

##### 8.12.3.1 General and channel modelling

**R4-2319823 On Poporgation Conditions in HST FR2 Enahced deployments**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2319839 Draft CR for channel model on Rel-18 FR2 HST demodulation requirement**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Samsung*

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

**R4-2319840 Draft big CR for TS 38.101-4 on Rel-18 FR2 HST demodulation requirement**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Samsung*

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

**R4-2319841 Simulation results summary for Rel-18 FR2 HST demodulation requirement**

*Type: other For: Information  
 Source: Samsung*

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

##### 8.12.3.2 PDSCH requirements with CA

**R4-2319741 draft CR: FRC of PDSCH demodulation requirements for FR2 HST**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR provides the FRCs used for UE demodulation requirements in FR2 HST.

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

**R4-2319837 Simulation results for PDSCH with CA**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320226 Simulation results on UE CA demodulation requirements for HST FR2**

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

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

**R4-2320579 HST FR2 Enhanced: UE Demodulation PDSCH Requirements with Carrier Aggregation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we provide our views on Issues related to HST FR2 with Carrier Aggregation

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

**R4-2320580 Simulation Results on HST FR2 Enhanced with Carrier Aggregation**

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

**Abstract:**

In this paper, we provide our simulation results on HST FR2 with Carrier Aggregation

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

**R4-2320583 Draft CR On HST FR2 PDSCH with CA for 38.101-4**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Adding new section for requirements for HST FR2 PDSCH with CA. Furthermore, the corresponding reference measurement channels are added as 2 new tables in the corresponding Appendix.

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

**R4-2320787 Simulation results for Intraband CA**

*Type: other For: Information  
 Source: Qualcomm Inc.*

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

##### 8.12.3.3 PDSCH requirements with multi-Rx Chain DL reception

**R4-2319742 UE demodulation requirements for FR2 HST multi-Rx reception**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues on UE demodulation requirements for simultaneous multi-Rx reception scenario in FR2 HST.

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

**R4-2319838 Discussion and simulation results for PDSCH requirements with multi-Rx reception**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320224 Discussion on UE multi-Rx demodulation requirements for HST FR2**

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

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

**R4-2320225 Draft CR on PDSCH requirement with multi-Rx reception (TS38.101-4, Rel-18)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320581 HST FR2 Enhanced: UE Demodulation PDSCH Requirements with Multi-Rx Chain DL Reception**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we provide our views on Issues related to HST FR2 with Multi-RX chain DL reception

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

**R4-2320582 Simulation Results on HST FR2 Enhanced with Multi-Rx Chain DL Reception**

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

**Abstract:**

In this paper, we provide our simulation results on HST FR2 with Multi-RX chain DL reception

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

**R4-2320788 Simulation results for Simultaneous RX**

*Type: other For: Information  
 Source: Qualcomm Inc.*

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

**R4-2320789 FR2 HST UE Demod Requirements with multiRX Chain Reception**

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

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

**R4-2320790 draftCR on applicability rules for multiRX FR2 HST UE Demod requirements**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Inc.*

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

##### 8.12.3.4 Demodulation aspects for tunnel deployment scenario

#### 8.12.4 Moderator summary and conclusions

**R4-2318212 Topic summary for [109][320] NR\_HST\_FR2\_enh\_Demod**

*Type: other For: Information  
 Source: Moderator (Samsung)*

**Abstract:**

[109][300] BDaT Session AI 8.12.3.1, 8.12.3.2, 8.12.3.3, 8.12.3.4

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

### 8.13 Air-to-ground network for NR

#### 8.13.1 General aspects (TR/big CR)

#### 8.13.2 FR1 co-existence evaluation for ATG network

#### 8.13.3 UE RF requirements

#### 8.13.4 BS RF requirements

**R4-2318303 Discussion on 1024QAM for ATG BS**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2320089 CR for TS 38.104 on adding RF requirements for ATG BS**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0543 rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

#### 8.13.5 BS RF conformance testing requirements

**R4-2318304 Draft CR for TS 38.141-1, On ATG BS requirements**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: CATT*

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

**R4-2318932 Discussion on BS RF conformance testing requirements**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2319650 ATG BS conformance**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Test model coverage

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

**R4-2320086 Further discussion on the ATG BS conformance test**

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

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

**R4-2320087 Draft CR for TS 38.141-1 on adding RF requirements for ATG BS**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320088 Draft CR for TS 38.141-2 on adding RF requirements for ATG BS**

*Type: draftCR For: Endorsement  
 38.141-2 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

#### 8.13.6 RRM core requirements

#### 8.13.7 RRM performance requirements

#### 8.13.8 Demodulation performance requirements

##### 8.13.8.1 General aspects

**R4-2318905 Summary of simulation results for ATG UE and BS demodulation requirements**

*Type: other For: Information  
 Source: CMCC*

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

**R4-2319546 Discussion on ATG general aspects**

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

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

**R4-2320220 Discussion on NR ATG demodulation requirements**

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

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

##### 8.13.8.2 UE demodulation performance and CSI requirements

**R4-2318906 Discussion on UE demodulation and CSI requirements for ATG scenario**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2318907 Simulation results for ATG PDSCH demodulation**

*Type: discussion For: Information  
 Source: CMCC*

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

**R4-2319231 Draft CR to 38.101-4 for FRC for PDSCH requirement for ATG network**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR provides the RMC for ATG PDSCH requirements

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

**R4-2319232 On PDSCH requirements for ATG network**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the 1024QAM for ATG PDSCH requirements

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

**R4-2319233 Updated simulation results for ATG PDSCH demodulation requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution submits our impairment results for ATG PDSCH

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

**R4-2319547 Discussion on ATG UE demodulation**

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

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

**R4-2319548 Simulation results for ATG UE demodulation**

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

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

**R4-2320218 [NR\_ATG-Perf] Draft CR on ATG PDSCH demodulation performance requirements (TS38.101-4, Rel-18)**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320222 Simulation results on NR UE ATG demodulation requirements**

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

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

**R4-2320791 ATG PDSCH Simulation Results**

*Type: other For: Information  
 Source: Qualcomm Inc.*

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

**R4-2320792 UE Demodulation Requirements for ATG**

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

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

**R4-2320793 draftCR on applicability rules for ATG UE Demod Requirements**

*Type: draftCR For: Endorsement  
 38.101-4 v18.1.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Inc.*

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

##### 8.13.8.3 BS demodulation performance requirements

**R4-2319321 Discussion on ATG BS Demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Remaining issues

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

**R4-2319322 Simulation results on ATG BS Demodulation requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

Simulation results with impairments

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

**R4-2319323 [NR\_ATG-Perf] Draft CR for TS38.141-1 PUSCH requirements and FRC tables**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Draft CR for TS38.141-1 PUSCH requirements and FRC tables

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

**R4-2319549 Simulation results for ATG BS demodulation requirements**

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

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

**R4-2319550 Draft CR to TS38141-2 the introduction of applicablity of PUSCH,PUCCH and PRACH for ATG performance requirements**

*Type: draftCR For: Endorsement  
 38.141-2 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319551 Draft CR to TS38141-2 the introduction of PUSCH requirements and FRCs for ATG performance requirements**

*Type: draftCR For: Endorsement  
 38.141-2 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319835 Discussion and simulation results for BS demodulation requirements for Rel-18 ATG**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319836 Draft CR on manufacturer and applicability rule of BS demodulation requirements for Rel-18 ATG**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Samsung*

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

**R4-2320219 [NR\_ATG-Perf] Draft CR on ATG PUSCH demodulation performance requirements and FRC definition (TS38.104, Rel-18)**

*Type: draftCR For: Endorsement  
 38.104 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei,HiSilicon*

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

**R4-2320221 Simulation results on NR BS ATG demodulation requirements**

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

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

#### 8.13.9 Moderator summary and conclusions

**R4-2318194 Topic summary for [109][302] NR\_ATG\_BSRF**

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

**Abstract:**

[109][300] BDaT Session AI 8.13.4, 8.13.5

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

**R4-2318213 Topic summary for [109][321] NR\_ATG\_Demod**

*Type: other For: Information  
 Source: Moderator (CMCC)*

**Abstract:**

[109][300] BDaT Session AI 8.13.8.1, 8.13.8.2, 8.13.8.3

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

### 8.14 NR support for dedicated spectrum less than 5MHz for FR1

#### 8.14.1 System parameter maintenance (resubmitted CR)

#### 8.14.2 UE RF requirement maintenance (resubmitted CR)

#### 8.14.3 BS RF requirement maintenance (resubmitted CR)

**R4-2318393 Draft CR to TS 38.141-1 on introduction of 3 MHz channel bandwidth in clauses 4.1, 6.3 and 6.6**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Required changes to support 3 MHz channel bandwidth in clauses 4.1, 6.3 and 6.6.

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

**R4-2318394 Big CR to TS 38.141-1 on introduction of 3 MHz channel bandwidth**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0388 rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, ZTE Corporation, Ericsson, Huawei*

**Abstract:**

Required changes to support 3 MHz channel bandwidth.

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

**R4-2318474 Discussion on Tx intermodulation requirements maintenance in certain region**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC., SoftBank Corp., KDDI Corporation, Rakuten mobile, Inc*

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

**R4-2318475 [NR\_FR1\_lessthan\_5MHz\_BW-Core] CR for Tx intermodulation core requirements in certain region**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0526 rev Cat: F (Rel-18)  
  
 Source: NTT DOCOMO, INC., SoftBank Corp., KDDI Corporation, Rakuten mobile, Inc*

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

**R4-2318476 [NR\_FR1\_lessthan\_5MHz\_BW-Core] CR for Tx intermodulation requirements in certain region**

*Type: CR For: Agreement  
 38.141-1 v18.3.0 CR-0389 rev Cat: F (Rel-18)  
  
 Source: NTT DOCOMO, INC., SoftBank Corp., KDDI Corporation, Rakuten mobile, Inc*

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

**R4-2318477 [NR\_FR1\_lessthan\_5MHz\_BW-Core] CR for OTA Tx intermodulation requirements in certain region**

*Type: CR For: Agreement  
 38.141-2 v18.3.0 CR-0552 rev Cat: F (Rel-18)  
  
 Source: NTT DOCOMO, INC., SoftBank Corp., KDDI Corporation, Rakuten mobile, Inc*

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

**R4-2318566 CR to TS 38.104 on clarification of applicable SS raster entries for 3 MHz channel bandwidth**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0528 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, ZTE Corporation, Ericsson*

**Abstract:**

Delete the undefined term 'DCH'.

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

**R4-2319198 Draft CR to TS38.141-1: Introduction of 3 MHz channel bandwidth with NB-IoT support**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2319581 Spectrum less than 5 MHz - BS RF conformance considerations**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses some issues found drafting the BS RF conformance spec and make proposals to address them

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

**R4-2319582 Draft CR to TS 38.141-1 - Introduction of 3 MHz channel bandwidth**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR is our contribution to the introduction of 3 MHz channel bandwidth, according to the work split agreed for TS 38.104.

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

**R4-2319583 CR to TS 37.141 - Consideration of NR 3 MHz channel bandwidth**

*Type: CR For: Agreement  
 37.141 v18.3.0 CR-1068 rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This CR considers the introduction of NR 3 MHz channel bandwidth

**Decision:** The document was **revised to R4-2320415**.

**R4-2319750 CR to TS 38.104 on support of NB-IoT operation in NR in-band for 3 MHz channel bandwidth**

*Type: CR For: Agreement  
 38.104 v18.3.0 CR-0542 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, ZTE Corporation, Ericsson*

**Abstract:**

Required changes to support NB-IoT operation in NR in-band for 3 MHz channel bandwidth.

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

**R4-2320151 Draft CR to TS 38.141-1: Operating band unwanted emissions for 3 MHz channel bandwidth**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: F (Rel-18)  
  
 Source: NEC*

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

**R4-2320415 CR to TS 37.141 - Consideration of NR 3 MHz channel bandwidth**

*Type: CR For: Agreement  
 37.141 v18.3.0 CR-1068 rev 1 Cat: B (Rel-18)  
  
 Source: Ericsson*

(Replaces R4-2319583)

**Abstract:**

This CR considers the introduction of NR 3 MHz channel bandwidth

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

**R4-2320844 Draft CR to TS 38.141-1: in-band blocking requirements for 3 MHz channel bandwidth (7.4.2) including in-band NB-IoT, Rel-18**

*Type: draftCR For: Endorsement  
 38.141-1 v18.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the work-split in R4-2305901, conducted in-band blocking test requirements are provided in this Draft CR for NR BS operation in 3MHz channel bandwidth, updated with the NB-IoT support.

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

#### 8.14.4 RRM core requirement

#### 8.14.5 RRM performance requirements

#### 8.14.6 Demodulation performance requirements

##### 8.14.6.1 UE demodulation performance and CSI requirements

**R4-2318665 Discussion on UE demodulation requirements for less than 5MHz BW**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318680 UE demodulation performance and CSI requirements for NR support for dedicated spectrum less than 5MHz for FR1**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318788 On Lessthan5MHz UE demod perf and CSI requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper present Nokia's view on the different aspects of UE demodulation performance and CSI requirements for new topic <5MHz including proposals on where to focus for requirement definition.

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

**R4-2318789 On Lessthan5MHz UE demod perf and CSI requirements - Simulations**

*Type: discussion For: Information  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper present Nokia's initial simuation results with focus on impact of puncturing PDCCH and PBCH

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

**R4-2319419 Discussion on UE demodulation requirements for dedicated spectrum less than 5MHz**

*Type: discussion For: Discussion  
 Source: Samsung Shenzhen*

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

**R4-2319541 Discussion on NR support for dedicated spectrum less than 5MHz for FR1 demodulation performance requirements**

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

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

**R4-2319542 Simulation results for UE demodulation performance and CSI requirements for less than 5MHz**

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

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

**R4-2319746 Discussion on UE demodulation and CSI reporting requirements for NR less than 5MHz**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation and CSI reporting requirements for WI NR less than 5MHz.

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

**R4-2320197 Discussions on UE demodulation and CSI requirements for dedicated sprectrum less than 5MHz for FR1**

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

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

**R4-2320198 Simulation results for PBCH requirements with 3MHz bandwidth**

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

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

**R4-2320704 Discussion on UE demodulation requirements for less than 5MHz BW**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2320794 UE Demodulation for less than 5MHz**

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

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

##### 8.14.6.2 BS demodulation performance requirements

**R4-2318041 Discussion on BS Demodulation on Less than 5 MHz**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In the following contribution we will provide Nokia’s view on the background and scope for RAN4 to specify BS demodulation performance requirements related to less than 5MHz CBW.

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

**R4-2318042 Supporting Simulations for BS Demodulation on Less than 5 MHz**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In the following contribution we will provide simulation results to support Nokia’s view on the background and scope for RAN4 to specify BS demodulation requirements related to less than 5MHz CBW.

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

**R4-2319315 Discussion on NR less than 5MHz BS demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

scope on PUSCH/PUCCH, applicability rule

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

**R4-2319316 Simualtion results for NR less than 5MHz BS demodulation requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

Comparing simulations for 3MHz and 5MHz on PUSCH/PUCCH

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

**R4-2319543 Discussion on BS demodulation performance requirements for less than 5MHz**

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

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

**R4-2319544 Simulation results for BS demodulation performance for less than 5MHz.**

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

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

**R4-2319844 Discussion and initial results for BS demodulation requirement for less than 5MHz**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320199 Discussions on BS requirements for dedicated sprectrum less than 5MHz for FR1**

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

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

#### 8.14.7 Moderator summary and conclusions

**R4-2318195 Topic summary for [109][303] NR\_FR1\_lessthan\_5MHz\_BW\_BSRF**

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

**Abstract:**

[109][300] BDaT Session AI 8.14.3

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

**R4-2318214 Topic summary for [109][322] NR\_FR1\_lessthan\_5MHz\_BW\_demod**

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

**Abstract:**

[109][300] BDaT Session AI 8.14.6.1, 8.14.6.2

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

### 8.15 Enhancement of TRP and TRS requirements and test methodologies

**R4-2318231 Adding NR channel bandwidths for OTA TRS testing**

*Type: discussion For: Approval  
 Source: Orange*

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

**R4-2319776 Adding NR channel bandwidths for OTA TRP/TRS testing**

*Type: discussion For: Approval  
 Source: Orange*

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

**R4-2320394 Adding NR channel bandwidths for OTA TRP/TRS testing**

*Type: discussion For: Approval  
 Source: Orange*

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

**R4-2320413 Adding NR channel bandwidths for OTA TRP/TRS testing**

*Type: discussion For: Approval  
 Source: Orange, Vodafone, AT&T, T-Mobile USA, Verizon, DISH Network, BT plc*

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

**R4-2320600 Orange, Vodafone, AT&T, T-Mobile USA, Verizon, DISH Network, BT plc, Telecom Italia**

*Type: discussion For: Approval  
 Source: Orange*

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

#### 8.15.1 General aspects

**R4-2318106 TP to TR 38.870 on TRP TRS test procedure for CA**

*Type: other For: Approval  
 Source: Huawei, HiSilicon, Rohde & Schwarz, Orange, OPPO, vivo, Vodafone, CAICT*

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

**R4-2318965 3GPP TR 38.870 v0.7.0**

*Type: draft TR For: Agreement  
 38.870 v0.7.0 CR- rev Cat: (Rel-18)  
  
 Source: vivo*

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

**R4-2318972 CR to TS 38.161 on New test configurations for Rel-18 TRP TRS**

*Type: CR For: Agreement  
 38.161 v17.3.0 CR-0007 rev Cat: B (Rel-18)  
  
 Source: vivo*

**Abstract:**

Cat B CR. Will generate Rel-18 TS

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

#### 8.15.2 Enhancement of test methodology

##### 8.15.2.1 Anechoic chamber test methodology

**R4-2318103 Measurement results for 3GPP Rel-18 TRP TRS AC lab alignment activity-Huawei**

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

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

**R4-2318105 on TxD phase drift and number of receive chains**

*Type: discussion For: Agreement  
 Source: Huawei, HiSilicon*

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

**R4-2318427 TP to TR38.870 on MIMO radiated output power metric**

*Type: pCR For: Approval  
 38.870 v0.6.0 CR- rev Cat: (Rel-18)  
  
 Source: Apple, T-Mobile USA*

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

**R4-2318432 On UL MIMO test methodology**

*Type: other For: Decision  
 Source: Apple, Vodafone, T-Mobile USA*

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

**R4-2318834 On Single-Layer UL MIMO for non-coherent/coherent UEs**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

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

**R4-2318966 TP to TR 38.870 on TRP TRS test method**

*Type: pCR For: Approval  
 38.870 v0.6.0 CR- rev Cat: (Rel-18)  
  
 Source: vivo*

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

**R4-2318967 Proposals for concluding the core part work of TRP TRS WI**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2319915 Discussion on single-layer UL MIMO test methodology**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2320175 Discussion on 2TX test methodology**

*Type: other For: Approval  
 Source: CAICT*

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

**R4-2320246 Discussion on TRP test method for Single-Layer UL-MIMO**

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

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

**R4-2320379 Discussion on FR1 2Tx TRP test method**

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

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

**R4-2320380 TP to TR 38.870 on 2Tx TRP test method**

*Type: pCR For: Approval  
 38.870 v0.6.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Incorporated*

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

##### 8.15.2.2 Reverberation chamber test methodology

**R4-2318104 Measurement results for 3GPP Rel-18 TRP TRS RC harmonization-Huawei**

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

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

**R4-2318969 Analysis of 3GPP TRP TRS AC lab alignment and RC harmonization measurement results**

*Type: other For: Approval  
 Source: vivo*

**Abstract:**

The contribution is reserved to provide analysis of all the measurement results submitted by comapnies. Will be uploaded before meeting starts.

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

**R4-2318971 Measurement results for 3GPP Rel-18 TRP TRS RC harmonization activity**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2319635 3GPP Rel-18 TRP TRS RC harmonization from SRTC**

*Type: discussion For: Approval  
 38.870 v CR- rev Cat: (Rel-18)  
  
 Source: SRTC*

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

**R4-2319921 3GPP Rel-18 TRP TRS LAD measurement for RC harmonization\_n78**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2320178 CAICT measurement results for 3GPP Rel-18 TRP TRS RC harmonization activity**

*Type: other For: Approval  
 Source: CAICT*

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

##### 8.15.2.3 MU assessment

**R4-2318835 On Single-Layer UL MIMO TRP Measurement Grid Uncertainties for the Considered Metric Options 1 and 2**

*Type: other For: Approval  
 Source: Keysight Technologies UK Ltd*

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

**R4-2320707 TP to TR 38.870 on contents for Annex B**

*Type: pCR For: Approval  
 38.870 v0.6.0 CR- rev Cat: (Rel-18)  
  
 Source: ROHDE & SCHWARZ*

**Abstract:**

This contribution is intended to provide the Text Proposals endorsed by RAN5 during RAN5#101 (November 2023) on Measurement Uncertainty, and to be included in Annex B of TR 38.870.

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

##### 8.15.2.4 Testing time reduction

**R4-2318429 On TRP test time reduction adopting reduced grids**

*Type: discussion For: Discussion  
 Source: Apple, Vodafone, AT&T, ETS Lindgren, Telecom Italia*

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

**R4-2318431 TP to TR 38.870 on test time reduction adopting reduced grids**

*Type: other For: Approval  
 38.870 v CR- rev Cat: (Rel-18)  
  
 Source: Apple*

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

**R4-2319270 Discussion on TRP TRS measurement grid for coherent UL MIMO**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320176 Discussion on 2Tx measurement grids**

*Type: other For: Approval  
 Source: CAICT*

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

#### 8.15.3 Performance requirements

**R4-2318428 Template for TRP TRS and MIMO OTA Device Information Collection**

*Type: other For: Approval  
 Source: Apple, Telecom Italia*

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

**R4-2318968 Discussions on TRP TRS requirement related work**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2318970 Measurement results for 3GPP Rel-18 TRP TRS AC lab alignment activity**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2319288 Measurement results for 3GPP Rel-18 TRP TRS AC lab alignment activity**

*Type: other For: Approval  
 Source: SGS Wireless*

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

**R4-2319641 3GPP Rel-18 TRP TRS AC lab alignment activity from SRTC**

*Type: discussion For: Approval  
 38.161 v CR- rev Cat: (Rel-18)  
  
 Source: SRTC*

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

**R4-2319920 3GPP Rel-18 TRP TRS LAD measurement for AC lab alignment\_n78**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2320177 CAICT measurement results for 3GPP Rel-18 TRP TRS AC lab alignment activity**

*Type: other For: Approval  
 Source: CAICT*

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

**R4-2320617 Updates to the working procedure for TRP TRS Performance Test Campaign**

*Type: discussion For: Decision  
 Source: TELECOM ITALIA S.p.A., Vodafone, China Telecom, Orange, T-Mobile USA*

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

**R4-2320626 On usage of coarse sampling grid for TRP/TRS measurement**

*Type: discussion For: Decision  
 Source: TELECOM ITALIA S.p.A., Vodafone, China Telecom, Orange, T-Mobile USA*

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

**R4-2320627 On device provisioning for TRP TRS Performance Test Campaign**

*Type: discussion For: Information  
 Source: TELECOM ITALIA S.p.A.*

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

#### 8.15.4 Moderator summary and conclusions

**R4-2318227 Topic summary for [109][335] NR\_FR1\_TRP\_TRS\_enh**

*Type: other For: Information  
 Source: Moderator (vivo)*

**Abstract:**

[109][300] BDaT Session AI 8.15.1, 8.15.2.1, 8.15.2.2, 8.15.2.3, 8.15.2.4, 8.15.3

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

### 8.16 Enhancement of Multiple Input Multiple Output Over-the-Air test methodology and requirements for NR UEs

#### 8.16.1 General aspects and TR

**R4-2318430 TP to TR 38.761 on Lab 6 Power Validation**

*Type: other For: Approval  
 38.761 v CR- rev Cat: (Rel-18)  
  
 Source: Apple*

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

**R4-2318836 CR to update preliminary FR2 MU**

*Type: CR For: Agreement  
 38.151 v17.5.0 CR-0020 rev Cat: F (Rel-17)  
  
 Source: Keysight Technologies UK Ltd*

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

**R4-2319164 3GPP TR 38.761 v0.1.0**

*Type: draft TR For: Agreement  
 38.761 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

**R4-2320060 TP to TR 38.761 on General Aspects and Measurement Setup**

*Type: pCR For: Approval  
 38.761 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

**R4-2320065 Updated Framework and time plan for FR1 MIMO OTA performance requirements development (Nov 2023)**

*Type: other For: Approval  
 Source: CAICT*

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

**R4-2320066 Updated Framework and time plan for FR2 MIMO OTA performance requirements development (Nov 2023)**

*Type: other For: Approval  
 Source: CAICT*

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

**R4-2320179 3GPP TR 38.761 v0.2.0**

*Type: draft TR For: Agreement  
 38.761 v0.2.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

#### 8.16.2 FR2 MIMO OTA test methodology enhancement

**R4-2320062 TP to TR 38.761 on FR2 channel model validation**

*Type: pCR For: Approval  
 38.761 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

#### 8.16.3 FR1 MIMO OTA test methodology enhancement

**R4-2318102 on identification of number receive paths in devices**

*Type: discussion For: Agreement  
 Source: Huawei, HiSilicon*

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

**R4-2318230 Updates to FR1 Channel model validation**

*Type: CR For: Agreement  
 38.151 v17.5.0 CR-0019 rev Cat: F (Rel-17)  
  
 Source: MVG Industries, MVG, Spirent, Keysight, Apple*

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

**R4-2318895 TP for TR 38.761 on channel model validation for n78 and n41**

*Type: other For: Approval  
 38.761 v CR- rev Cat: (Rel-18)  
  
 Source: Xiaomi*

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

**R4-2318896 Measure results for 3GPP Rel-18 FR1 MIMO OTA Lab Alignment**

*Type: other For: Approval  
 Source: Xiaomi*

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

**R4-2319109 On FR1 MIMO OTA noise evaluation**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2319916 Study of number of slots for low band FR1 MIMO OTA**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2320061 TP to TR 38.761 on channel model validation for n28**

*Type: pCR For: Approval  
 38.761 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

**R4-2320063 TP to TR 38.761 on FR1 noise impact**

*Type: pCR For: Approval  
 38.761 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

**R4-2320068 Channel model validation results for Bands n1, n5**

*Type: discussion For: Discussion  
 Source: CAICT*

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

**R4-2320381 Discussion on FR1 MIMO OTA test method**

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

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

**R4-2320594 On FR1 MIMO OTA test time reduction**

*Type: other For: Approval  
 Source: CAICT*

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

#### 8.16.4 MU assessment

#### 8.16.5 Performance requirements

**R4-2318269 Measurement results of Mediatek lab for 3GPP Rel-18 FR1 MIMO OTA lab alignment activity**

*Type: discussion For: Approval  
 Source: Mediatek India Technology Pvt.*

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

**R4-2318927 PADs measurement results for n28.**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2318977 Discussions on FR1 MIMO OTA requirement related work**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2319919 3GPP Rel-18 FR1 MIMO OTA PAD measurement**

*Type: other For: Approval  
 Source: OPPO*

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

**R4-2320064 TP to TR 38.761 on Rel-18 lab alignment framework**

*Type: pCR For: Approval  
 38.761 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: CAICT*

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

**R4-2320067 CAICT Rel-18 FR1 MIMO OTA Lab Alignment PAD Results**

*Type: discussion For: Discussion  
 Source: CAICT*

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

**R4-2320595 On MIMO OTA performance requirements work**

*Type: other For: Approval  
 Source: CAICT*

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

#### 8.16.6 Moderator summary and conclusions

**R4-2318228 Topic summary for [109][336] NR\_MIMO\_OTA\_enh**

*Type: other For: Information  
 Source: Moderator (CAICT)*

**Abstract:**

[109][300] BDaT Session AI 8.16.1, 8.16.2, 8.16.3, 8.16.4, 8.16.5

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

### 8.17 BS and UE EMC enhancements

#### 8.17.1 BS EMC enhancements

**R4-2320498 On the open issues listed in the WF**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Provide feedback of the open issues listed in the WF

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

**R4-2320499 CR to TS 37.113 Implementation of EMC enhancement**

*Type: CR For: Agreement  
 37.113 v17.2.0 CR-0129 rev Cat: B (Rel-18)  
  
 Source: Ericsson, Nokia, ZTE Corporation*

**Abstract:**

Implementation of EMC enhancement for MSR BS

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

**R4-2320825 CR to TS 37.114: Implementation of AAS BS testing simplifications, Rel-18**

*Type: CR For: Agreement  
 37.114 v17.1.0 CR-0109 rev Cat: B (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the Draft CR Endorsed in R4-2316933 during RAN4#108bis meeting (Xiamen), a formal CR is provided.

NR\_LTE\_EMC\_enh WI outcomes are captured in this CR, while the underlying frameform for EMC-specific declarations is introduces in a separate Mainte

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

**R4-2320828 Discussion on remaining open issues for the BS EMC testing simplification**

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

**Abstract:**

In this contribution we provide feedback on the remaining open issues for the EMC testing simplification, as collected in the related WF from RAN4#108bis meeting.

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

#### 8.17.2 UE EMC enhancements

**R4-2318894 CR to 38.124 on R18 UE EMC requirements for CA and DC combinations**

*Type: CR For: Agreement  
 38.124 v18.0.0 CR-0049 rev Cat: B (Rel-18)  
  
 Source: Xiaomi*

**Abstract:**

Define test configurations for UE supporting multiple NR CA or DC band combinations

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

**R4-2320831 CR to 36.124: EMC requirements simplifications for CA and DC combinations, Rel-18**

*Type: CR For: Agreement  
 36.124 v17.1.0 CR-0062 rev Cat: B (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the draft CR Endorsed during RAN4#108bis meeting in R4-2316850, in this contribution we provide formal CR to implement EMC requirements simplifications for E-UTRA CA and DC combinations.

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

#### 8.17.3 Moderator summary and conclusions

**R4-2318196 Topic summary for [109][304] NR\_LTE\_EMC\_enh**

*Type: other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

[109][300] BDaT Session AI 4.3, 8.17.1, 8.17.2

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

### 8.18 NR demodulation performance evolution

#### 8.18.1 General aspects (TR/big CR)

**R4-2319394 Big CR on TR 38.878**

*Type: CR For: Agreement  
 38.878 v18.0.0 CR-0002 rev Cat: F (Rel-18)  
  
 Source: China Telecom*

**Abstract:**

For post meeting e-mail approval. Capture changes to TR38.878 in case there are multiple draft CRs.

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

#### 8.18.2 Advanced receiver to cancel inter-user interference for MU-MIMO

##### 8.18.2.1 Receiver assumption and NWA signaling

**R4-2318558 Discussion on MIMO-IC on MU-MIMO**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318575 On NWA for advanced receiver to cancel intra-user interference for MU-MIMO**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318576 On UE feature for advanced receiver for MU-MIMO**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318784 CR for TR38.878 on Summary of link level evaluation**

*Type: CR For: Agreement  
 38.878 v18.0.0 CR-0001 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Removal of [] in section "Summary of link level evaluation". DraftCR was endorsed in RAN4#108bis

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

**R4-2318785 On Advanced Receivers - Receiver assumption and NWA signalling**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's views on various open issues with relation to receiver assumptions and NWA signalling for advanced receivers

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

**R4-2318934 MU-MIMO advanced receiver discussion**

*Type: discussion For: Approval  
 Source: Qualcomm, Inc.*

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

**R4-2319234 On the left open issues and UE capabilities**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the left open issues and UE capabilities.

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

**R4-2319334 discussion on advanced receiver assumption and NWA signaling for MU-MIMO**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319392 Discussion on the receiver assumption and signaling aspects for the advanced receiver for MU-MIMO**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2319539 Discussion on Receiver assumption and NWA signaling for MU-MIMO**

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

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

**R4-2320172 Discussion on advanced receiver- NWA signaling and UE capability**

*Type: discussion For: Discussion  
 Source: Spreadtrum Communications*

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

**R4-2320187 On receiver assumption and NWA signalling on advanced receiver for MU-MIMO**

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

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

##### 8.18.2.2 Test parameters and simulation results

**R4-2318559 Simulation results of MIMO-IC on MU-MIMO**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318577 On demod for requirements for MU-MIMO with advanced receiver**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318786 On Advanced Receivers - Test parameters**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's views on various open issues with relation to test parameters for advanced receivers

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

**R4-2318787 On Advanced Receivers - Test parameters - Simulations**

*Type: discussion For: Information  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This paper presents Nokia's simulation results for Advanced receivers.

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

**R4-2319235 On the parameter assumptions for phase II**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the parameter assumptions for phase II

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

**R4-2319335 discussion on advanced receiver test parameters for MU-MIMO**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2319393 Discussion on test parameters for the advanced receiver for MU-MIMO**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2319540 Discussion on advanced receiver test parameters for MU-MIMO**

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

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

**R4-2320188 On test parameters for advanced receiver for MU-MIMO**

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

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

#### 8.18.3 Absolute physical layer throughput requirements with link adaptation

**R4-2318578 Introducing release independence for Absolute physical layer throughput requirements**

*Type: CR For: Agreement  
 38.307 v17.10.0 CR-0133 rev Cat: B (Rel-18)  
  
 Source: Apple*

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

**R4-2318796 CR for 38.101-4 on Demodulation and CSI requiremets for ATP**

*Type: CR For: Agreement  
 38.101-4 v18.1.0 CR-0428 rev Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

CR to remove remaining [] and yellow highlighted text.

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

#### 8.18.4 Moderator summary and conclusions

**R4-2318215 Topic summary for [109][323] NR\_demod\_enh3\_Part1**

*Type: other For: Information  
 Source: Moderator (CTC)*

**Abstract:**

[109][300] BDaT Session AI 8.18.1, 8.18.2.1, 8.18.2.2, 8.18.3

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

### 8.19 Study on evolution of NR duplex operation

#### 8.19.1 General aspects (TR)

**R4-2318925 Draft TR 38.858 SBFD**

*Type: other For: Agreement  
 Source: CMCC*

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

#### 8.19.2 Study the feasibility of and impact on RF requirements

##### 8.19.2.1 Adjacent channel co-existence evaluation

**R4-2318924 TP for TR 38.858 to update annex E**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: CMCC*

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

**R4-2319183 Draft TP to TR 38.858 Section 11.3**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Samsung*

**Abstract:**

Propose additional text to 11.3 in TR 38.858 to summarize the study.

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

**R4-2319184 Draft TP to TR 38.858 Section 11.2**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Samsung*

**Abstract:**

Propose content to 11.2 in TR 38.858.

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

**R4-2319395 TP to TR 38.858: Additions and corrections relevant for adjacent channel co-existence evaluation results in clause 11**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

In this contribution we provide some additional information and corrections with intent to finalize the adjacent channel coexistence evaluation part of the SBFD SI (FS\_NR\_duplex\_evo). At the end of this contribution a text proposal for TR 38.858, clause 1

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

**R4-2319396 Additional simulation results (Scenario 3 and 9) related to SBFD adjacent channel coexistence evaluation**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution we provide additional simulation results for Scneario 3 and Scenario 9 (indoor)

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

**R4-2319399 SBFD coexistence simulation results (Scenario 3 and 9) in Excel-format**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

In this contribution additional simulation results are provided for Scenario 3 and Scenario 9 (in-door)

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

**R4-2319400 TP to TR 38.858: Addition of missing information relevant for interference power scaling in Annex E**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

In this contribution we provide a text proposal missing information and other updates required to finalise the work for SBFD SI. At the end of this contribution a text proposal is attached for approval.

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

**R4-2319780 TP to TR 38.858: Section 11.2**

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

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

**R4-2319807 TP to TR 38.858 Annex E**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Germany*

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

**R4-2320055 TP to TR 38.858: Chapter 11 Annex E corrections**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Charter Communications, Spark NZ Ltd.*

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

**R4-2320056 TP to TR 38.858: Chapter 11 Editorial corrections**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Charter Communications, Spark NZ Ltd.*

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

**R4-2320057 TP to TR 38.858: Chapter 11 Case conclusions**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Charter Communications, Spark NZ Ltd.*

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

**R4-2320253 ACIR enhancement in NR duplex evolution adjacent-channel coexistence study**

*Type: discussion For: Approval  
 38.858 v CR- rev Cat: (Rel-18)  
  
 Source: CableLabs, Charter Communications, Nokia, Nokia Shanghai Bell, Spark NZ Ltd.*

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

**R4-2320448 TP to TR 38.858: Section 11.2**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Germany*

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

**R4-2320640 TP to TR 38.858: Chapter 11 Annex E corrections**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Charter Communications, Spark NZ Ltd.*

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

**R4-2320641 TP to TR 38.858: Chapter 11 Editorial corrections**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Charter Communications, Spark NZ Ltd.*

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

**R4-2320642 TP to TR 38.858: Chapter 11 Case conclusions**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Charter Communications, Spark NZ Ltd.*

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

##### 8.19.2.2 Implementation feasibility of SBFD

**R4-2318923 TP for TR 38.858 to add RAN4 conclusion part**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: CMCC*

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

###### 8.19.2.2.1 Feasibility of FR1 BS aspects

**R4-2318471 Feasibility of filtering for FR1 BS in SBFD**

*Type: discussion For: Discussion  
 Source: Murata Manufacturing Co Ltd.*

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

**R4-2318472 TP to TR 38.858: Feasibility of FR1 WA BS aspects**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Murata Manufacturing Co Ltd.*

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

**R4-2319678 TP to TR 38.858: Feasibility of FR1 BS**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2320051 TP to TR 38.858: Feasibility of FR1 MR BS**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320052 TP to TR 38.858: Feasibility of FR1 WA BS**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2320327 Further discussion on full duplex from FR1 BS perspective**

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

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

**R4-2320615 Text Proposal to TR 38.858 on feasibility of FR1 Wide Area BS aspects**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Samsung*

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

**R4-2320616 Text Proposal to TR 38.858 on feasibility of FR1 Medium Range BS aspects**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Samsung*

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

###### 8.19.2.2.2 Feasibility of FR2 BS aspects

**R4-2319679 TP to TR 38.858: Feasibility of FR2 wide area BS**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2320053 TP to TR 38.858: Feasibility of FR2 BS aspects**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

###### 8.19.2.2.3 Feasibility of FR1 UE aspects

**R4-2318683 On UE sub-band selectivity**

*Type: discussion For: Approval  
 Source: Apple*

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

**R4-2318684 TP on UE sub-band selectivity and impact on UE RF requirements**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Apple*

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

**R4-2319002 Maintenance TP to TR 38.858  on UE aspects for FR1 in Full Duplex operation**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: vivo*

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

**R4-2319024 Maintenance TP to TR 38.858 on Feasibility of FR1 UE aspects**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: MediaTek (Shenzhen) Inc.*

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

###### 8.19.2.2.4 Feasibility of FR2 UE aspects

**R4-2319003 Maintenance TP to TR 38.858 on UE aspects for FR2-1 in Full Duplex operation**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: vivo*

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

##### 8.19.2.3 Impacts on BS RF requirements

**R4-2318305 Discussion on BS RF requirements impact for SBFD**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2318926 Discussion on SBFD BS RF requirement**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2319648 TP to TR 38.858: Update on BS requirements**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Correct TX switching requirements

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

**R4-2319649 On SBFD BS requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Remaining open issues on BS requirements

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

**R4-2319680 RF requirments for SBFD operation**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Huawei, HiSilicon*

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

**R4-2320054 Discussion on BS RF requirements for SBFD**

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

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

**R4-2320328 Discussion on BS RF requirement impacts from SBFD perspective**

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

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

**R4-2320329 TP to TR 38.858 Impact on BS RF requirements**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320613 Study on the remaining issues of SBFD-capable BS RF requirements**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320614 Text Proposal to TR 38.858 on BS RF requirements**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Samsung*

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

##### 8.19.2.4 Impacts on UE RF requirements

#### 8.19.3 Summary of regulatory aspects

**R4-2319781 TP for TR 38.858 on Europe regulatory requirements**

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

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

**R4-2320449 TP for TR 38.858 on Europe regulatory requirements**

*Type: pCR For: Approval  
 38.858 v1.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Qualcomm Germany*

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

#### 8.19.4 Moderator summary and conclusions

**R4-2318197 Topic summary for [109][305] FS\_NR\_duplex\_evo\_Part1**

*Type: other For: Information  
 Source: Moderator (Samsung)*

**Abstract:**

[109][300] BDaT Session AI 8.19.1, 8.19.2.2.1, 8.19.2.2.2, 8.19.2.3, 8.19.3

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

**R4-2318198 Topic summary for [109][306] FS\_NR\_duplex\_evo\_Part2**

*Type: other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

[109][300] BDaT Session AI 8.19.2.2.3, 8.19.2.2.4, 8.19.2.4

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

**R4-2318199 Topic summary for [109][307] FS\_NR\_duplex\_evo\_Part3**

*Type: other For: Information  
 Source: Moderator (CMCC)*

**Abstract:**

[109][300] BDaT Session AI 8.19.2.1

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

### 8.20 Study on low-power wake-up signal and receiver for NR

### 8.21 Study on Artificial Intelligence (AI)/Machine Learning (ML) for NR air interface

### 8.22 Expanded and improved NR positioning

### 8.23 Multi-carrier enhancements for NR

### 8.24 Further NR mobility enhancements

### 8.25 Dual Tx/Rx Multi-SIM for NR

### 8.26 NR NTN enhancement

#### 8.26.1 General aspects

##### 8.26.1.1 System parameters

**R4-2319569 NTN enhancement: system parameters update**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribuition discusses some necessary updates to previsouly agreed system parameters

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

**R4-2320152 Draft CR on TS 38.108: Corrections on channel raster and synchronization raster**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: B (Rel-18)  
  
 Source: NEC*

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

##### 8.26.1.2 Regulatory information

**R4-2319182 Discussion on regulatory information on NTN UE**

*Type: other For: Approval  
 Source: Samsung*

**Abstract:**

In this document, we propose the analysis over the FCC chapter 25 clause by clause and the corresponding requirements that associated with these terms.

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

**R4-2319571 NTN enhancement: CR to TR 38.863 NTN Ka-band Regulatory aspects**

*Type: CR For: Agreement  
 38.863 v17.2.0 CR-0010 rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This contribution is a CR to TR 38.863 related to regulatory aspects of the NTN Ka-band

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

##### 8.26.1.3 Others

**R4-2320949 Draft CR proposal to add Doppler and Delay variation examples as a function of time for NGSO and GSO in a new Annex**

*Type: CR For: Agreement  
 38.863 v17.2.0 CR-0011 rev Cat: B (Rel-18)  
  
 Source: THALES*

**Abstract:**

Note: The CR coversheet has CR revision as 0. Doppler shift and Delay variation versus time is not explicitly defined in the document. Plots for NGSO (LEO at 600 km, LEO at 1200 km) with orbit inclination of 88 degrees and GSO with orbit inclination of 7

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

**R4-2320952 Draft TP for TR 37.911 - Study on self-evaluation towards the IMT-2020 submission of the 3GPP Satellite Radio Interface Technology**

*Type: pCR For: Approval  
 37.911 v0.1.0 CR- rev Cat: (Rel-18)  
  
 Source: THALES*

**Abstract:**

TP for on-going TR 37.911 - Clauses 7.2 and 7.3 (Bandwidth and Spectrum)

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

#### 8.26.2 Co-existence study for above 10GHz bands

**R4-2318298 Co-existence study result for above 10GHz bands**

*Type: other For: Discussion  
 Source: CATT*

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

**R4-2318493 Discussion on Co-existence study result for above 10GHz bands**

*Type: other For: Discussion  
 Source: CATT*

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

**R4-2319260 Joint proposals on NTN co-existence study**

*Type: discussion For: Approval  
 Source: Samsung R&D Institute UK*

**Abstract:**

This document contains proposals from comapnies to further update NTN co-existence assumptions.

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

**R4-2319566 NTN enhancement: coexistence simulations results**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution provides our coexistence simulation results for NTN Ka-band

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

**R4-2319567 NTN enhancement: initial conclusion from simulations results**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution provides an initial conclusion of the simulation results for the coexistence study on NTN operation in the Ka-band, based on our results

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

**R4-2319777 Results of NTN coexistence study in above 10GHz**

*Type: discussion For: Discussion  
 Source: Samsung Electronics Nordic AB*

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

**R4-2319890 Some simulation results for Rel-18 NTN coexistence study**

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

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

**R4-2320330 Coexistence simulation results for NTN in Ka-band**

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

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

**R4-2320392 Coexistence simulation results between TN and NTN above 10GHz bands for VSAT and L-ESIM**

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

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

**R4-2320970 NTN-TN co-existence simulation results in above 10 GHz bands**

*Type: discussion For: Discussion  
 Source: THALES, Magister Solutions Ltd*

**Abstract:**

The scope of this document is to provide simulation results for NTN-TN coexistence scenarios in above 10 GHz and related derived requirements.

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

#### 8.26.3 SAN RF requirements

**R4-2318299 Further discussion on SAN RF requirements for above 10GHz bands**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2318300 Draft CR for TS 38.108, On introduction of above 10GHz bands to clause 10.1-10.4**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: B (Rel-18)  
  
 Source: CATT*

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

**R4-2318302 Simulation results for Ka-band NTN SAN dynamic range**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2319570 NTN enhancement: draft CR to TS 38.108 NTN Ka-band - system parameters udpate**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This draft CR proposed needed updates to clause 5 and NR-ARFCN ranges

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

**R4-2319577 NTN enhancement: draft CR to TS 38.108 NTN Ka-band - clause 4.3**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This contribution is a draft CR to TS 38.108, introducing NTN Ka-band, drafting clause 4.3

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

**R4-2319578 NTN enhancement: draft CR to TS 38.108 NTN Ka-band - clause 4.6**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This contribution is a draft CR to TS 38.108, introducing NTN Ka-band, drafting clause 4.6

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

**R4-2319579 NTN enhancement: draft CR to TS 38.108 NTN Ka-band - clause 9.4**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

This contribution is a draft CR to TS 38.108, introducing NTN Ka-band, drafting clause 9.4

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

**R4-2319580 NTN enhancement: Running CR to TS 38.108 NTN Ka-band**

*Type: CR For: Agreement  
 38.108 v18.0.0 CR-0047 rev Cat: B (Rel-18)  
  
 Source: Ericsson, Huawei, Thales*

**Abstract:**

This contribution is the running CR to TS 38.108 capturing all endorsed draft CRs

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

**R4-2319711 Draft CR to TS 38.108: correction on EVM measurement annex for FR2-NTN, Rel-18**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: (Rel-18)  
  
 Source: Keysight Technologies UK Ltd*

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

**R4-2320153 Draft CR on TS 38.108: Radiated transmit power requirements in extreme conditions**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: F (Rel-18)  
  
 Source: NEC*

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

**R4-2320154 Draft CR on TS 38.108: OTA modulation quality**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: F (Rel-18)  
  
 Source: NEC*

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

**R4-2320155 Draft CR on TS 38.108: EVM annex for FR2-NTN**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: F (Rel-18)  
  
 Source: NEC*

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

**R4-2320331 Further discussion on SAN RF requirements for NTN in Ka-band**

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

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

**R4-2320334 Draft CR to TS 38.108 Clause 10.5 OTA in-band selectivity and blocking**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320335 Draft CR to TS 38.108 Clause 10.6 OTA out-of-band blocking**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320336 Draft CR to TS 38.108 Clause 10.7 OTA in-channel selectivity**

*Type: draftCR For: Endorsement  
 38.108 v18.0.0 CR- rev Cat: (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320917 Draft CR on TS 38.108 for Clause 9.7 - OTA unwanted emissions**

*Type: CR For: Agreement  
 38.108 v18.0.0 CR-0049 rev Cat: B (Rel-18)  
  
 Source: THALES*

**Abstract:**

Note: The CR coversheet have CR revision as 0. Adding SAN Type 2-O information to Clause 9.7 - OTA unwanted emission for above 10 GHz WI.

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

**R4-2320972 Remaining issues for SAN RF requirements in above 10 GHz**

*Type: discussion For: Discussion  
 Source: THALES*

**Abstract:**

This contribution further considers remaining issues for SAN RF to be considered for NTN in above 10 GHz.

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

#### 8.26.4 SAN RF conformance testing requirements

**R4-2318301 Discussion on SAN RF conformance testing requirements for above 10GHz bands**

*Type: other For: Approval  
 Source: CATT*

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

#### 8.26.5 UE RF requirements

#### 8.26.6 RRM core requirements

#### 8.26.7 RRM performance requirements

#### 8.26.8 Demodulation performance requirements

**R4-2320238 Discussion on general issues for demodulation requirements for NR NTN enhancements**

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

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

##### 8.26.8.1 SAN demodulation performance requirements

**R4-2318058 Discussion on NR NTN SAN Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The introduction of NR NTN enhancements for Rel-18 has been outlined in the WID, with an aim to add functionality to increase features that were introduced in Rel 15, 16 and 17.

In this paper, we present Nokia’s view on the impact to SAN demodulation req

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

**R4-2319846 View on BS demodulation requirements for NTN enhancement**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320239 Discussion on SAN demodulation requirements for NR NTN enhancements**

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

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

##### 8.26.8.2 UE demodulation performance and CSI requirements

**R4-2318059 NR NTN UE demodulation disussion**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The introduction of NR NTN enhancements for Rel-18 has been outlined in the WID, with an aim to add functionality to increase features that were introduced in Rel 15, 16 and 17.

In this paper, we present Nokia’s view on the impact to UE demodulation requi

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

**R4-2318582 On UE demod and CSI requirements for NR NTN enhancement**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318735 Discussion on the UE demodulation and CSI requirements for NR NTN enhancements**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2318736 Simulation results summary for NR NTN enhancements**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

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

**R4-2319223 On general issues and UE demodulation requirements for NR NTN enh.**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the scope for PDCCH, PBCH, CQI report, SDR, detailed configuration on PDSCH for Ka band/FR2

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

**R4-2319224 Simulation results for NR NTN enhancement UE demodulation**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution showed limited cases of simulation results on PDSCH for channel model disucssion

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

**R4-2319313 Discussion on NR NTN enhancement SAN demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Channel model, link budget for high modulaiton for Ka band/FR2

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

**R4-2319314 Simulation results for NR NTN enhancement SAN demodulation requirements**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

Initial simulations on PUSCH for channel model

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

**R4-2320240 Discussion on UE demodulation requirements for NR NTN enhancements**

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

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

#### 8.26.9 Moderator summary and conclusions

**R4-2318200 Topic summary for [109][308] NR\_NTN\_enh\_Part1**

*Type: other For: Information  
 Source: Moderator (Thales)*

**Abstract:**

[109][300] BDaT Session AI 8.26.1.1, 8.26.1.2, 8.26.1.3

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

**R4-2318201 Topic summary for [109][309] NR\_NTN\_enh\_Part2**

*Type: other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

[109][300] BDaT Session AI 8.26.3, 8.26.4

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

**R4-2318202 Topic summary for [109][310] NR\_NTN\_enh\_Part3**

*Type: other For: Information  
 Source: Moderator (Samsung)*

**Abstract:**

[109][300] BDaT Session AI 8.26.2

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

**R4-2318216 Topic summary for [109][324] NR\_NTN\_enh\_SAN\_UE\_demod**

*Type: other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

[109][300] BDaT Session AI 8.26.8.1, 8.26.8.2

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

### 8.27 Further NR coverage enhancements

#### 8.27.1 UE RF requirements

#### 8.27.2 BS demodulation performance requirements

**R4-2318056 Discussion on Coverage Enhancement BS Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document discusses features associated with coverage enhancement under the Work Item “Further NR coverage enhancements” and the impact of the newly introduced features on Base Station demodulation within RAN4.

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

**R4-2318057 Simulations for Coverage Enhancement BS Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Within this paper we provide simulation results for the PRACH repetition feature introduced in RAN1, as well as the impact of FDSS on PUSHC and their associated impact for BS demodulation performance requirements.

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

**R4-2319310 Discussion on NR further coverage enhancement demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

configuration on PRACH repetition, necessary on FDSS

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

**R4-2319311 Simulation results for NR PRACH repetition**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

Initial simulations for PRACH repetition

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

**R4-2319391 Discussion on the BS performance part for Rel-18 coverage enhancement WI**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2319533 Discussion on NR\_cov\_enh2 demodulation requirements**

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

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

**R4-2319843 View on BS demodulation requirements for further coverage enhancement**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2320223 Discussion on BS demodulation requirements for further coverage enhancements**

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

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

#### 8.27.3 Moderator summary and conclusions

**R4-2318217 Topic summary for [109][325] NR\_cov\_enh2\_demod**

*Type: other For: Information  
 Source: Moderator (CTC)*

**Abstract:**

[109][300] BDaT Session AI 8.27.2

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

### 8.28 NR Network-controlled Repeaters

#### 8.28.1 General aspects

**R4-2318308 Discussion on Rel-17 repeater terminology**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2320258 Discussion of terminology related to repeaters**

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

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

**R4-2320342 Discussion on RAN4 feature list for NCR-MT**

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

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

#### 8.28.2 RF core requirements

##### 8.28.2.1 RF requirements for NCR-Fwd

**R4-2318309 Discussion on RF requirement for NCR-Fwd**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2318311 CR for TS 38.106, Introduction of Operating band and channel arrangement for NCR**

*Type: CR For: Agreement  
 38.106 v18.2.0 CR-0040 rev Cat: B (Rel-18)  
  
 Source: CATT*

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

**R4-2319645 NCR RF requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Remaining open RF issues

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

**R4-2319647 Draft CR to 38.106: NCR conducted TX requirements**

*Type: draftCR For: Endorsement  
 38.106 v18.2.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Draft CR as per work split

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

**R4-2320167 Draft CR to TS 38.106: Clause 7 radiated requirement**

*Type: draftCR For: Endorsement  
 38.106 v18.2.0 CR- rev Cat: B (Rel-18)  
  
 Source: NEC*

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

**R4-2320260 Discussion of Spurious Emissions requirements for NCR-Fwd**

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

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

**R4-2320343 Discussion on RF requirements for NCR-Fwd**

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

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

**R4-2320347 Draft CR of introduction of NCR into TS 38.106: Clause 1 ~4**

*Type: other For: Approval  
 38.106 v CR- rev Cat: (Rel-18)  
  
 Source: ZTE Corporation*

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

##### 8.28.2.2 RF requirements for NCR-MT

**R4-2318310 Discussion on RF requirement for NCR-MT**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2318916 Draft CR for TS 38.106 to introduce conducted transmitter requirement for NCR-MT**

*Type: draftCR For: Endorsement  
 38.106 v18.2.0 CR- rev Cat: B (Rel-18)  
  
 Source: CMCC*

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

**R4-2320257 CR to TS 38.106 with Clause 9: conducted receiver requirement for NCR-MT**

*Type: CR For: Agreement  
 38.106 v18.2.0 CR-0045 rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell, Dell Technologies*

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

**R4-2320344 Discussion on RF requirements for NCR-MT**

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

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

**R4-2320348 Draft CR of introduction of NCR into TS 38.106: Clause 11**

*Type: other For: Approval  
 38.106 v CR- rev Cat: (Rel-18)  
  
 Source: ZTE Corporation*

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

**R4-2320850 Draft CR to TS 38.106: OTA TX requirements for NCR-MT**

*Type: draftCR For: Endorsement  
 38.106 v18.2.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Based on the pre-arranged work-split, Draft CR on the OTA TX requirements for NCR-MT is provided.

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

#### 8.28.3 EMC core requirements

**R4-2319026 CR to TS 38.114 network controlled repeater EMC core**

*Type: CR For: Agreement  
 38.114 v17.3.0 CR-0007 rev Cat: B (Rel-18)  
  
 Source: ZTE, Nokia, Nokia Shanghai Bell, Ericsson*

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

**R4-2320843 General approach to the NCR EMC test configurations**

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

**Abstract:**

Referring to related discussion on legacy test configurations specification, in this contribution we provide discussion on simplified approach to the EMC test configurations for NCR.

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

**R4-2320845 Further discussion on NCR EMC open issues**

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

**Abstract:**

In this contribution we provide further discussion on open issues for NCR EMC.

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

**R4-2320846 Draft CR to TS 38.114: NCR Emissions requirements, Rel-18**

*Type: draftCR For: Endorsement  
 38.114 v17.3.0 CR- rev Cat: B (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Implementation of EMC requirements in a way that the NCR node is covered as a single entity, for both Emissions and Immunity requirements, aligning with the IAB approach.

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

#### 8.28.4 RF conformance testing

**R4-2318307 Further discussion on RF conformance testing for NCR**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2318915 Discussion on NCR conformance testing**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2319178 Discussions on NCR RF conformance test**

*Type: other For: Approval  
 Source: Samsung*

**Abstract:**

In this paper, we try to clarify the understanding of these corresponding wayforwards and seek solutions to avoid any conflicts or misunderstanding.

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

**R4-2319398 Background and technical challenges with BS RF co-location requirements in relation to development of NCR RF co-location requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we summarize the background and technical challenges with current concept used for BS-to-BS colocation requirements. Before re-using the concept to other nodes like e.g., NCR, careful considerations regarding the technical feasibility

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

**R4-2320259 NCR conformance testing**

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

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

**R4-2320345 Discussion on conformance testing requirement for NCR**

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

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

#### 8.28.5 RRM core requirements

#### 8.28.6 Demodulation performance requirements

**R4-2319536 Discussion on NCR-MT demodulation requirements**

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

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

**R4-2319537 Simulation results for NCR-MT demodulation requirements**

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

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

**R4-2319538 Simulation results collection for NCR-MT demodulation requirements**

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

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

**R4-2319646 NCR demod results**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Simulation results

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

**R4-2320236 Discussion on demodulation performance requirements for NR network-controlled repeaters**

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

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

**R4-2320237 Simulation results on demodulation performance requirements for NR network-controlled repeaters**

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

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

**R4-2320577 NCR Demodulation Performance Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we provide our views on Issues related to NCR Demodulation Performance Requirements

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

**R4-2320578 Simulation Results on NCR PDSCH and PDCCH Demodulation Requirements**

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

**Abstract:**

In this paper, we provide our simulation results on NCR PDSCH and PDCCH Demodulation Performance Requirements

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

#### 8.28.7 Moderator summary and conclusions

**R4-2318203 Topic summary for [109][311] NR\_netcon\_repeater\_RF**

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

**Abstract:**

[109][300] BDaT Session AI 8.28.1, 8.28.2.1, 8.28.2.2, 8.28.3

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

**R4-2318204 Topic summary for [109][312] NR\_netcon\_repeater\_RFConformance**

*Type: other For: Information  
 Source: Moderator (CATT)*

**Abstract:**

[109][300] BDaT Session AI 8.28.4

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

**R4-2318218 Topic summary for [109][326] NR\_netcon\_repeater\_Demod**

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

**Abstract:**

[109][300] BDaT Session AI 8.28.6

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

### 8.29 NR MIMO evolution for downlink and uplink

#### 8.29.1 UE RF requirements for simultaneous transmission with multi-panel (STxMP)

#### 8.29.2 RRM core requirements

#### 8.29.3 RRM performance requirements

#### 8.29.4 Demodulation performance requirements

**R4-2320050 NR MIMO Evolution: Views on UE demodulation and CSI performance requirements**

*Type: discussion For: Discussion  
 Source: QUALCOMM Europe Inc. - Spain*

**Abstract:**

Views on NR MIMO evolution topics are shared.

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

**R4-2320892 NR MIMO Evolution: Views on UE demodulation and CSI performance requirements**

*Type: discussion For: Discussion  
 Source: QUALCOMM Europe Inc. - Spain*

**Abstract:**

Updated version of the NR MIMO evolution proposals for #109

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

##### 8.29.4.1 UE demodulation performance and CSI requirements

**R4-2318560 Discussion on NR MIMO evolution for downlink**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318561 Simulation results of NR MIMO evolution for downlink**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2318587 On UE demod and CSI requirements for NR MIMO evolution**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2318795 On MIMO\_evo UE demodulation performance and CSI requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The paper present Nokia's view on the different aspects of UE demodulation performance and CSI requirements for the new topic MIMO Evolution including proposals on where to focus for requirement definition.

**Decision:** The document was **not treated**.

**R4-2319336 discussion on Rel-18 MIMO UE demodulation performance and CSI requirements**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2319747 Discussion on UE demodulation and CSI reporting requirements for MIMO evolution**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation and CSI reporting requirements for WI MIMO evolution.

**Decision:** The document was **not treated**.

**R4-2320231 Discussion on UE demodulation requirements for MIMO evolution**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

##### 8.29.4.2 BS demodulation performance requirements

**R4-2318054 Discussion on MIMO evolution BS Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document disucsses some of the features defined in the work item “MIMO evolution” within Rel-18 of 5G NR, specifically those features which have an impact related to the BS demodulation performance requirements, whereby these will be discussed, and o

**Decision:** The document was **not treated**.

**R4-2318055 Simulations for MIMO evolution BS Demodulation**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This document provides simulations to help introduces to RAN4 some of the features defined in the work item “MIMO evolution” within Rel-18 of 5G NR, specifically those features which have an impact related to the BS demodulation performance requirements,

**Decision:** The document was **withdrawn**.

**R4-2319312 Discussion on MIMO evo UL demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Configuration on DM-RS eTypeII, necessary and testability for SDM with STxMP

**Decision:** The document was **not treated**.

**R4-2319845 Discussion and simulation results on BS demodulation requirements for Rel-18 FeMIMO**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2320230 Discussion on BS demodulation requirements for MIMO evolution**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.29.5 Moderator summary and conclusions

**R4-2318219 Topic summary for [109][327] NR\_MIMO\_evo\_DL\_UL\_demod**

*Type: other For: Information  
 Source: Moderator (Samsung)*

**Abstract:**

[109][300] BDaT Session AI 8.29.4.1, 8.29.4.2

**Decision:** The document was **not treated**.

### 8.30 NR sidelink evolution

#### 8.30.1 General aspects (TR/big CR)

#### 8.30.2 UE RF requirements

#### 8.30.3 RRM core requirements

#### 8.30.4 RRM performance requirements

#### 8.30.5 UE demodulation performance requirements

**R4-2318938 SL enhancement demod discussion**

*Type: discussion For: Approval  
 Source: Qualcomm, Inc.*

**Decision:** The document was **not treated**.

**R4-2319266 Discussion on work scope and test cases for SL evolution demodulation performance**

*Type: discussion For: Discussion  
 Source: LG Electronics Inc.*

**Decision:** The document was **not treated**.

**R4-2320195 Discussions on sidelink UE demodulation requirements**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2320584 NR Sidelink Evolution: UE Demodulation Performance Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we provide our views on UE demodulation performance requirements for NR Sidelink Evolution

**Decision:** The document was **not treated**.

#### 8.30.6 Moderator summary and conclusions

**R4-2318220 Topic summary for [109][328] NR\_SL\_enh2\_demod**

*Type: other For: Information  
 Source: Moderator (LGE)*

**Abstract:**

[109][300] BDaT Session AI 8.30.5

**Decision:** The document was **not treated**.

### 8.31 Enhanced support of reduced capability NR devices

### 8.32 Enhanced NR Sidelink Relay

### 8.33 Mobile IAB (Integrated Access and Backhaul) for NR

#### 8.33.1 Co-existence study

**R4-2320254 mIAB RF co-existence**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

#### 8.33.2 RF core requirements

**R4-2319784 CR to TS 38.174 on RF core requirements for NR Mobile IAB**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0076 rev Cat: B (Rel-18)  
  
 Source: Qualcomm Germany, Ericsson*

**Abstract:**

Introduce mobile IAB feature and its associated RF core requirements

**Decision:** The document was **withdrawn**.

**R4-2319785 Draft Big CR to TS 38.174 on RF core requirements for NR Mobile IAB**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0077 rev Cat: B (Rel-18)  
  
 Source: Qualcomm Germany*

**Abstract:**

Big CR to introduce mobile IAB feature and its associated RF core requirements

**Decision:** The document was **not treated**.

**R4-2320256 CR to TS 38.174 on RF core requirements for NR Mobile IAB**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0078 rev Cat: B (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2320417 CR to TS 38.174 on RF core requirements for NR Mobile IAB**

*Type: CR For: Agreement  
 38.174 v18.2.0 CR-0085 rev Cat: B (Rel-18)  
  
 Source: Qualcomm Incorporated, Ericsson*

**Decision:** The document was **not treated**.

**R4-2320531 CR for clarifying RF requirements for mIAB**

*Type: draftCR For: Endorsement  
 38.174 v18.2.0 CR- rev Cat: B (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

In this CR, some text in previous endorsed CR is updated based on WF.

**Decision:** The document was **not treated**.

#### 8.33.3 RF conformance testing

**R4-2319783 Discussion on mobile-IAB RF conformance**

*Type: discussion For: Approval  
 Source: Qualcomm Germany*

**Decision:** The document was **not treated**.

**R4-2320156 Draft CR on TS 38.174: Suffix information for mIAB node**

*Type: draftCR For: Endorsement  
 38.174 v18.2.0 CR- rev Cat: F (Rel-18)  
  
 Source: NEC*

**Decision:** The document was **not treated**.

**R4-2320255 Discussion on mobile IAB conformance testing**

*Type: other For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2320530 On mIAB RF Conformance test**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on mIAB RF conformance scope.

**Decision:** The document was **not treated**.

#### 8.33.4 RRM core requirements

#### 8.33.5 RRM performance requirements

#### 8.33.6 Demodulation performance requirements

**R4-2319225 Overview on demodulation requirements for mIAB-MT and mIAB-DU**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides overview for mIAB demodulation

**Decision:** The document was **not treated**.

**R4-2319782 Discussion on mobile-IAB demodulation performance requirements**

*Type: discussion For: Approval  
 Source: Qualcomm Germany*

**Decision:** The document was **not treated**.

**R4-2319827 On Mobile IAB Demodulation Performance Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2320232 Discussion on demodulation performance requirements for mobile IAB**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 8.33.7 Moderator summary and conclusions

**R4-2318205 Topic summary for [109][313] NR\_mobile\_IAB\_RF**

*Type: other For: Information  
 Source: Moderator (Qualcomm)*

**Abstract:**

[109][300] BDaT Session AI 8.33.1, 8.33.2, 8.33.3

**Decision:** The document was **not treated**.

**R4-2318221 Topic summary for [109][329] NR\_mobile\_IAB\_demod**

*Type: other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

[109][300] BDaT Session AI 8.33.6

**Decision:** The document was **not treated**.

### 8.34 Network energy saving for NR

#### 8.34.1 BS RF requirements

#### 8.34.2 BS conformance testing requirements

#### 8.34.3 RRM core requirements

#### 8.34.4 RRM performance requirements

#### 8.34.5 UE demodulation performance and CSI requirements

**R4-2318353 Discussion on Network energy saving for NR UE demodulation performance and CSI requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2318354 Simulation results on Network energy saving for NR UE demodulation performance and CSI requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **not treated**.

**R4-2318678 Discussion on UE demodulation performance and CSI requirements for Network Energy Savings for NR**

*Type: discussion For: Discussion  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2319337 discussion on demodulation and CSI requirements for NES**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2319552 Discussion on demodulation requirements for Network energy saving**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2319748 Discussion on UE demodulation and CSI reporting requirements for NES**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation and CSI reporting requirements for WI network energy saving.

**Decision:** The document was **not treated**.

**R4-2320196 Discussions on Rel-18 NES demodulation and CSI requirements**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2320798 Discussion paper on UE Demod tests for Network Energy Savings**

*Type: discussion For: Approval  
 Source: Qualcomm Inc.*

**Decision:** The document was **not treated**.

#### 8.34.6 Moderator summary and conclusions

**R4-2318222 Topic summary for [109][330] Netw\_Energy\_NR\_demod**

*Type: other For: Information  
 Source: Moderator (Huawei)*

**Abstract:**

[109][300] BDaT Session AI 8.34.5

**Decision:** The document was **not treated**.

### 8.35 NR Support for UAV

### 8.36 Enhancement of NR dynamic spectrum sharing

#### 8.36.1 General and work plan

#### 8.36.2 UE demodulation performance requirements

**R4-2318588 UE demodulation performance requirements for NR dynamic spectrum sharing**

*Type: discussion For: Discussion  
 Source: Apple*

**Decision:** The document was **not treated**.

**R4-2318664 Discussion on PDCCH requirements for DSS enhancements**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Decision:** The document was **not treated**.

**R4-2318729 Discussion on the demodulation performance requirements for enhanced NR dynamic spectrum sharing**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

**Decision:** The document was **not treated**.

**R4-2319222 On UE demodulation requirement for enhancement of Dynamic Spectrum Sharing**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the parameter assumption for initial evaluations

**Decision:** The document was **not treated**.

**R4-2319545 Discussion on NR DSS demodulation requirements**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**R4-2320200 Discussions on performance requirements for Rel-18 DSS**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

**R4-2320585 Enhancement of NR Dynamic Spectrum Sharing: UE Demodulation Performance Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this paper, we provide our views on UE demodulation performance requirements for Enhanced NR DSS

**Decision:** The document was **not treated**.

#### 8.36.3 Moderator summary and conclusions

**R4-2318223 Topic summary for [109][331] NR\_DSS\_enh**

*Type: other For: Information  
 Source: Moderator (Ericsson)*

**Abstract:**

[109][300] BDaT Session AI 8.36.1, 8.36.2

**Decision:** The document was **not treated**.

## 9 Rel-18 on-going work Items for LTE

### 9.1 Rel-18 LTE-Advanced Carrier Aggregation for x bands (2<=x<= 6) DL with y bands (y=1, 2) UL

### 9.2 Additional LTE bands for UE categories M1/M2/NB1/NB2 in Rel-18

### 9.3 Introduction of the Extended L-band (UL 1668-1675, DL 1518-1525) for IoT NTN

### 9.4 Introduction of a new FDD band (L+S band) for IoT NTN operation

### 9.5 High Power UE (Power Class 2) for LTE FDD Band 14

### 9.6 IoT (Internet of Things) NTN (non-terrestrial network) enhancements

#### 9.6.1 General aspects

#### 9.6.2 UE RF requirements

#### 9.6.3 SAN RF requirements

#### 9.6.4 RRM core requirements

#### 9.6.5 RRM performance requirements

#### 9.6.6 Demodulation performance requirements

**R4-2318232 Discussion on IoT NTN**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In the following contribution we will provide Nokia’s view on the background and scope for RAN4 to specify demodulation performance requirements related to IOT NTN Enhancements

**Decision:** The document was **not treated**.

**R4-2318666 Workplan on demodulation requirements for IoT-NTN enhancement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Decision:** The document was **not treated**.

**R4-2318667 Discussion on UE requirements for IoT-NTN enhancement**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

**Decision:** The document was **not treated**.

**R4-2318734 Discussion on the performance requirements for IoT NTN enhancements**

*Type: discussion For: Discussion  
 Source: Qualcomm India Pvt Ltd*

**Decision:** The document was **not treated**.

**R4-2319749 Discussion on demodulation requirements for IoT-NTN enhancements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE and SAN demodulation requirements for Rel-18 IoT-NTN enhancements.

**Decision:** The document was **not treated**.

**R4-2319847 View on SAN demodulation requirement for Rel-18 IoT over NTN**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2320229 Discussion on demodulation performance requirements for IoT NTN enhancement**

*Type: discussion For: Discussion  
 Source: Huawei,HiSilicon*

**Decision:** The document was **not treated**.

#### 9.6.7 Moderator summary and conclusions

**R4-2318224 Topic summary for [109][332] IoT\_NTN\_Demod**

*Type: other For: Information  
 Source: Moderator (MediaTek)*

**Abstract:**

[109][300] BDaT Session AI 6.2.4.1.4, 9.6.6

**Decision:** The document was **not treated**.

### 9.7 Enhanced LTE Support for UAV

## 10 Rel-18 feature list

## 11 Liaison and output to other groups

### 11.1 R18 related

#### 11.1.1 LS on combination of HST and RRM relaxation (R2-2311435)

#### 11.1.2 LS on the CA Aggregated BW capability signaling by the UE (R2-2311440)

### 11.2 R17 related

#### 11.2.1 Applicability of pre-configured measurement gaps for RedCap UE (R3-233478)

#### 11.2.2 Monitoring of paging occasions for CG-SDT with HD-FDD Redcap UEs (R2-2304562)

#### 11.2.3 LS on CG-SDT RRM test procedure (R5-235340)

#### 11.2.4 Reply LS on monitoring of paging occasions for CG-SDT with HD-FDD Redcap UEs (R2-2311424)

#### 11.2.5 Power class related topics

#### 11.2.6 Others

### 11.3 R15, R16 related

#### 11.3.1 LS on RRM test cases with testability issues (R5-233782)

#### 11.3.2 LS on SRS antenna switching for TDD-FDD band combinations (R1-2308582)

#### 11.3.3 Reply LS on intraBandENDC-Support (R2-2308855)

#### 11.3.4 Reply LS on update for “interBandMRDC-WithOverlapDL-Bands-r16” in 38.306 (R2-2309218)

#### 11.3.5 Reply LS on report quantity parameter setting for CQI reporting with 1Tx (R1-2310649)

#### 11.3.6 Reply LS on power scaling and PHR in 38.213 (R1-2310555)

#### 11.3.7 Others

### 11.4 Moderator summary and conclusions

## 12 RAN task

### 12.1 NTN testing work for NGSO deployments

**R4-2318072 CR on clarification on test condition for IoT NTN**

*Type: CR For: Agreement  
 36.133 v18.3.1 CR-7255 rev Cat: F (Rel-18)  
  
 Source: MediaTek inc., Samsung, Qualcomm*

**Decision:** The document was **not treated**.

**R4-2318229 Topic summary for [108][337] RAN\_task\_NTN\_test**

*Type: other For: Information  
 Source: Moderator (MediaTek)*

**Abstract:**

[109][300] BDaT Session AI 12.1

**Decision:** The document was **not treated**.

**R4-2318396 [NR\_NTN\_solutions-Perf] CR to TS 38.133 Annex for NTN test condition (CAT F, Rel-17)**

*Type: CR For: Agreement  
 38.133 v17.11.0 CR-3666 rev Cat: F (Rel-17)  
  
 Source: Samsung, MediaTek, Qualcomm*

**Decision:** The document was **not treated**.

**R4-2318397 [NR\_NTN\_solutions-Perf] CR to TS 38.133 Annex for NTN test condition (CAT A, Rel-18)**

*Type: CR For: Agreement  
 38.133 v18.3.0 CR-3667 rev Cat: A (Rel-18)  
  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2318399 Rel-17 NTN UE conformance test issues**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **not treated**.

**R4-2318441 CR to 38.101-5 on clarification for non-zero Doppler condition for frequency error**

*Type: CR For: Agreement  
 38.101-5 v17.5.0 CR-0041 rev Cat: F (Rel-17)  
  
 Source: Apple, Ericsson*

**Decision:** The document was **not treated**.

**R4-2318442 CR to 38.101-5 on clarification for non-zero Doppler condition for frequency error**

*Type: CR For: Agreement  
 38.101-5 v18.3.0 CR-0042 rev Cat: A (Rel-18)  
  
 Source: Apple, Ericsson*

**Decision:** The document was **withdrawn**.

**R4-2320549 On NTN frequeny error test**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

in this paper, we provide our view on RAN task on frequency error test

**Decision:** The document was **not treated**.

**R4-2320975 Summary of SIB19/SIB31 parameters for NGSO and GSO NTN UE/NTN IoT testing**

*Type: discussion For: Information  
 Source: THALES*

**Abstract:**

This document presents examples of ephemeris generation and related examples of Doppler and Delay values. Please also refer to R5-237216 (THALES, “NGSO satellite Ephemeris file generation methodology for NTN NR UE testing”) and R5-237213 (THALES, “GSO sat

**Decision:** The document was **not treated**.

## 13 Revision of the Work Plan

## 14 Any other business

## 15 Close of the meeting