3GPP TSG-RAN WG4 Meeting # 101bis-e R4-22xxxxx

**Electronic Meeting, Jan 17th - 25th, 2022**

**Source: RAN4 vice chair (Samsung)**

**Title:** **RAN4#101-bis-e BSRF\_Test\_Demod Session Chair notes**

**Agenda Item:** **2**

**Document for:** **Information**

## 4 Rel-17 feature list

## 5 Rel-17 spectrum related WIs for NR

### 5.4 Introduction of 900 MHz spectrum to 5G NR applicable for Rail Mobile Radio

#### 5.4.3 BS RF requirements

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**Email discussion for [101-bis-e][311] RAIL\_900\_1900MHz\_BSRF, AI 5.4.3, 5.5.3– Michal Szydelko**

**R4-2202953 Email discussion summary for [101-bis-e][311] RAIL\_900\_1900MHz\_BSRF**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**R4-2201805 Cross-check on the implementation of ECC Decision (20)02 for RMR900**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution, we analyse progress on translation of the ECC decision (20)02 [1] into RAN4 BS RF requirements for RMR900, and provide further proposals on the remaining issues identified after analysis of the ECC (20)02 regulations.

Session Chair Note： Move to this AI from AI 5.4.1

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

**R4-2201806 draft CR to TS 38.104: consideration of regional requirements for RMR900**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

Based on the related discussion paper, it was identified that certain aspects of the ECC (20)02 regulation for RMR900 are not properly reflected.

Specifically, the OOB limits specified in ECC (20)02 table 5 are subject to the follwing note: “on a case-by

Session Chair Note： Move to this AI from AI 5.4.1

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

**R4-2201324 RMR 900 MHz - BS RF**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses the remaining open issues related to BS RF requirements when introducing the new RMR 900MHz band

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

**R4-2201325 Draft CR to TS 38.141-2: RMR 900MHz and 1900MHz bands introduction**

*Type: draftCR For: Endorsement  
 38.141-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This a draft CR to TS 38.141-2 introducing support for the new RMR 900MHz band

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

**R4-2201326 Draft CR to TS 36.104: RMR 900MHz and 1900MHz bands introduction**

*Type: draftCR For: Endorsement  
 36.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This a draft CR to TS 36.104 introducing support for the new RMR 900MHz band

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

**R4-2201327 Draft CR to TS 36.141: RMR 900MHz and 1900MHz bands introduction**

*Type: draftCR For: Endorsement  
 36.141 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This a draft CR to TS 36.141 introducing support for the new RMR 900MHz band

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

**R4-2201807 Remaining aspects for BS RF requirements for RMR900**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution, we provide discussion on the remaining issues for the RMR900-specific BS RF requirements.

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

**R4-2201808 Draft CR to TS 38.104: RX requirements**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

Draft CR to TS 38.104: implementation of RMR900 and RMR1900 bands

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

**R4-2201809 TP to TR 38.853: BS RF requirements**

*Type: pCR For: Approval  
 38.853 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

TP to TR 38.853: BS RF requirements

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

**R4-2201810 Draft CR to TS 37.105: RMR implementation**

*Type: draftCR For: Endorsement  
 37.105 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

Draft CR to TS 37.105: implementation of RMR900 and RMR1900 bands

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

**R4-2201996 draft CR to 37.104 on introduction of n100 co-existence requirements**

*Type: draftCR For: Endorsement  
 37.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2202003 draft CR to 38.104 on introduction of n100 (system parameters)**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2202026 Draft CR to TS 37.145-1: RMR implementation**

*Type: draftCR For: Endorsement  
 37.145-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

Implementation of RMR900 and RMR1900 co-location blocking to protect AAS BS receiver.

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

**R4-2202027 Draft CR to TS 37.145-2: RMR implementation**

*Type: draftCR For: Endorsement  
 37.145-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

Implementation of RMR900 and RMR1900 co-location blocking to protect AAS BS receiver.

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

**R4-2201689 TR\_38.853\_changes\_clause 9**

*Type: pCR For: Approval  
 38.853 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

**Session Chair Note: Move to this AI from 5.4.4**

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

**R4-2201811 Consideration of coordinated/un-coordinated deployments for the RMR900 requirements in RAN4 specifications**

*Type: discussion For: Discussion  
 Sour22ce: Huawei*

**Abstract:**

In this contribution, we discuss aspects related to the coordinated/un-coordinated deployments considerations for RMR900 BS and related implications on RAN4 specifications. Related TP to TR 38.853 is attached for approval.

**Session Chair Note: Move to this AI from 5.4.4**

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

**R4-2201999 draft CR to 37.141 on introduction of n100 co-existence requirements**

*Type: draftCR For: Endorsement  
 37.141 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Session Chair Note: Move to this AI from 5.4.4**

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

### 5.5 Introduction of 1900 MHz spectrum to 5G NR applicable for Rail Mobile Radio

#### 5.5.3 BS RF requirements

**Refer to Email discussion for [101-bis-e][311] RAIL\_900\_1900MHz\_BSRF**

**R4-2201812 Cross-check on the implementation of ECC Decision (20)02 for RMR1900**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution, we analyse progress on translation of the ECC decision (20)02 [1] into RAN4 BS RF requirements for RMR1900.

Session Chair Note: Move to this AI from AI 5.5.1

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

**R4-2201329 RMR 1900 MHz - BS RF**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses the remaining open issues related to BS RF requirements when introducing the new RMR 1900MHz band

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

**R4-2201813 Remaining aspects for BS RF requirements for RMR1900**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution, we provide discussion on the remaining issues for the RMR1900-specific BS RF requirements.

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

**R4-2201814 TP to TR 38.852: BS RF requirements**

*Type: pCR For: Approval  
 38.852 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

TP to TR 38.852: BS RF requirements

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

**R4-2201997 draft CR to 37.104 on introduction of n101 co-existence requirements**

*Type: draftCR For: Endorsement  
 37.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2202004 draft CR to 38.104 on introduction of n101 (system parameters)**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201686 TR\_38.852\_changes\_clause 9**

*Type: pCR For: Approval  
 38.852 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Union Inter. Chemins de Fer*

Session Chair Note: Move to this AI from AI 5.5.4

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

**R4-2201815 Consideration of coordinated/un-coordinated deployments for the RMR1900 requirements in RAN4 specifications**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution, we discuss aspects related to the coordinated/un-coordinated deployments considerations for RMR1900 BS and related implications on RAN4 specifications. Related TP to TR 38.852 is attached for approval.

Session Chair Note: Move to this AI from AI 5.5.4

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

**R4-2202000 draft CR to 37.141 on introduction of n101 co-existence requirements**

*Type: draftCR For: Endorsement  
 37.141 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

*Cat: (Rel-17)  
  
 Source: Ericsson, BT plc*

**Abstract:**

TP for TR 38.717-02-01 to include dual UL for CA\_n3-n20

Session Chair Note: Move to this AI from AI 5.5.4

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

## 6 Rel-17 non-spectrum related work items for NR

### 6.1 Multiple Input Multiple Output (MIMO) Over-the-Air (OTA) requirements for NR UEs

#### 6.1.1 General

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**Email discussion for [101-bis-e][324] NR\_MIMO\_OTA, AI 6.1– Xuan Yi**

**R4-2202954 Email discussion summary for [101-bis-e][324] NR\_MIMO\_OTA**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2200966 3GPP TS 38.151 v0.7.0**

*Type: draft TS For: Approval  
 38.151 v0.7.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

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

**R4-2200970 Discussion on framework for FR1 MIMO OTA performance**

*Type: discussion For: Approval  
 Source: vivo*

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

**R4-2201920 Illustration of Device Orientations for Select Test Points**

*Type: pCR For: Approval  
 38.151 v0.6.0 CR- rev Cat: (Rel-17)  
  
 Source: Keysight Technologies UK Ltd*

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

#### 6.1.2 Performance requirements

##### 6.1.2.1 Performance Requirements for FR1

**R4-2200572 On framework for PAD alignment of NR UE FR1 MIMO OTA**

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

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

**R4-2200576 FR1 MIMO OTA channel validation**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Abstract:**

Proposal1: Adopt PDP pass/fail limits as below table.

Proposal2: Define cross-polarization pass/fail limit as [±1dB].

Observation: Channel validation result are submitted for all listed items as one of Lab volunteers.

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

**R4-2200969 Pass/Fail limit for FR1 MIMO OTA lab alignment activity**

*Type: other For: Approval  
 Source: vivo*

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

**R4-2201282 Commercial devices preparation and data handling**

*Type: discussion For: Approval  
 Source: OPPO*

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

**R4-2201602 Framework for FR1 MIMO OTA lab alignment activity**

*Type: discussion For: (not specified)  
 Source: CAICT*

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

##### 6.1.2.2 Performance Requirements for FR2

**R4-2200580 FR2 MIMO OTA Simulation**

*Type: discussion For: Approval  
 Source: MediaTek Beijing Inc.*

**Abstract:**

We submit our FR2 MIMO OTA simulation result based on fundamental scenario for alignment.

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

**R4-2200777 Discussion on FR2 MIMO OTA requirements**

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

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

**R4-2200778 Summary results for FR2 MIMO OTA simulation**

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

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

**R4-2201441 Discussion FR2 MIMO OTA performance requirements**

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

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

##### 6.1.2.3 MU assessment for FR1 and FR2

**R4-2200779 Discussion on preliminary MU assessment for FR2 MIMO OTA**

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

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

**R4-2200968 Proposal for MU budget of FR1 MIMO OTA**

*Type: other For: Approval  
 Source: vivo*

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

#### 6.1.3 Testing methodologies

##### 6.1.3.1 Testing parameters for Performance

**R4-2200780 TP on TS 38.151 for test parameters of FR2 performance**

*Type: pCR For: (not specified)  
 38.151 v0.6.0 CR- rev Cat: (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

##### 6.1.3.2 Optimization of test methodologies

**R4-2200731 Max downlink power verification of MIMO OTA test system**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2200967 TP to TS38.151 on FR2 maximum downlink power and test procedure**

*Type: pCR For: Approval  
 38.151 v0.6.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

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

##### 6.1.3.3 Channel model validation

**R4-2200409 TP to TS38.151 on FR1 Spatial Channel Model Validation**

*Type: other For: Approval  
 Source: Spirent Communications*

**Abstract:**

Based on the agreements in WF [1], the text proposals for updating the FR1 channel model validation annex of [2] is provided in this contribution.

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

**R4-2200573 Further results on FR1 channel model validation**

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

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

**R4-2200832 FR1 channel model validation results for CMCC & BUPT joint lab**

*Type: discussion For: Decision  
 Source: CMCC BUPT*

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

**R4-2200906 FR1 MIMO OTA Lab Alignment, Channel Model Validation**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2201494 Validation results and limits for FR1 CDL-C UMa channel model-v1**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

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

**R4-2201591 FR1 MIMO OTA channel model validation results and views on PDP pass/fail limits**

*Type: discussion For: (not specified)  
 Source: CAICT*

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

**R4-2201676 Reference Channel Emulation PDP for Validation Purposes for FR1 CDL-C UMa**

*Type: discussion For: Approval  
 Source: CAICT, CMCC, Keysight Technologies, Spirent Communications*

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

**R4-2201919 Pass/Fail Limits for FR1 Channel Model Validation**

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

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

### 6.2 Introduction of UE TRP (Total Radiated Power) and TRS (Total Radiated Sensitivity) requirements and test methodologies for FR1 (NR SA and EN-DC)

#### 6.2.1 General and work plan

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**Email discussion for [101-bis-e][325] FR1\_TRP\_TRS\_Part1, AI 6.2.1, 6.2.2.1, 6.2.2.2, 6.2.3– Ruixin Wang**

**R4-2202955 Email discussion summary for [101-bis-e][325] FR1\_TRP\_TRS\_Part1**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**Email discussion for [101-bis-e][326] FR1\_TRP\_TRS\_Part2, AI 6.2.2.3, 6.2.2.4– Qifei Liu**

**R4-2202956 Email discussion summary for [101-bis-e][326] FR1\_TRP\_TRS\_Part2**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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| **Tdoc number** | **Title** | **Source** | **Comments** |
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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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**R4-2202049 TR 38.834 v0.3.0**

*Type: draft TR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: OPPO*

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

**R4-2200732 Discussion on hand phantom handling in FR1 TRP TRS**

*Type: discussion For: Approval  
 Source: Samsung*

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

**R4-2200733 TP to TR 38.834 on band parameters**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Samsung*

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

**R4-2200971 3GPP TS 38.161 v0.1.0**

*Type: draft TS For: Approval  
 38.161 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

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

**R4-2200975 Discussion and Text Proposals on band parameters**

*Type: other For: Approval  
 38.834 v CR- rev Cat: (Rel-17)  
  
 Source: vivo*

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

**R4-2200977 TP to TR 38.834 on Phantom definition**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

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

**R4-2200981 Updated workplan of TRP TRS WI**

*Type: Work Plan For: Approval  
 Source: vivo*

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

**R4-2201285 TP to TR 38.834 on multi antenna**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: OPPO*

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

**R4-2201606 Progress on MU and recommendations from RAN5#93-e**

*Type: discussion For: Approval  
 38.834 v CR- rev Cat: (Rel-17)  
  
 Source: ROHDE & SCHWARZ*

**Abstract:**

This contribution provides a brief summary of the MU progress in RAN5, together with some recommendations to RAN4 work identified during the discussion.

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

**R4-2201649 TP to TR 38.834 on skeleton for Annex B**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: ROHDE & SCHWARZ*

**Abstract:**

This contribution provides the Text Proposal endorsed by RAN5 during RAN5#93-e on the structure of Annex B of TR 38.834 which will contain the MU estimation.

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

#### 6.2.2 Test methodology

**R4-2200935 TP to TR 38.834 on performance metrics**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: CAICT*

**Abstract:**

This paper further refines the text proposal on performance metrics.

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

##### 6.2.2.1 SA test methodology

**R4-2200450 TP to TR 38.834 on P-MPR handling**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Apple*

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

**R4-2200972 TP to TR 38.834 on SA TRP TRS test procedure**

*Type: pCR For: Approval  
 38.834 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: vivo, CAICT*

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

##### 6.2.2.2 EN-DC test methodology

**R4-2200449 Views on EN-DC methodology**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200574 on remaining details of EN-DC TRP test configuration**

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

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

**R4-2200734 Discussion on ENDC power splitting for TRS**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2200785 Discussion on EN-DC test methodology**

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

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

**R4-2200973 Discussion and Text Proposals on EN-DC TRP TRS test procedure**

*Type: other For: Approval  
 38.834 v CR- rev Cat: (Rel-17)  
  
 Source: vivo, CAICT*

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

**R4-2201495 On EN-DC power split for TRS**

*Type: discussion For: (not specified)  
 Source: Xiaomi*

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

##### 6.2.2.3 UE with multiple antennas test methodology

**R4-2200786 Discussion on TAS ON test methodology**

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

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

**R4-2201284 On the influence factors of Tx antenna switch**

*Type: discussion For: Approval  
 Source: OPPO*

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

**R4-2201286 Consideration on Tx Diversity**

*Type: discussion For: Approval  
 Source: OPPO*

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

##### 6.2.2.4 Test time reduction

**R4-2200980 Discussion on alternative test method for TRP TRS testing time reduction**

*Type: discussion For: Approval  
 Source: vivo*

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

#### 6.2.3 Performance requirements

**R4-2201283 On hand phantom selection for Rel-17 requirement**

*Type: discussion For: Approval  
 Source: OPPO*

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

##### 6.2.3.1 Framework for lab alignment and requirements

**R4-2200448 Further views on manufacturing tolerances**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200575 On framework for NR UE TRP/TRS lab alignment and requirements**

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

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

**R4-2200976 Working procedure for TRP TRS requirement development**

*Type: other For: Approval  
 Source: vivo*

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

##### 6.2.3.2 SA requirements

**R4-2200974 TP to TS 38.161 on requirement applicability**

*Type: pCR For: Approval  
 38.161 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: vivo*

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

##### 6.2.3.3 EN-DC requirements

### 6.5 NR repeater

#### 6.5.1 General

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**Email discussion for [101-bis-e][301] NR\_Repeater\_General, AI 6.5.1– Valentin Gheorghiu**

**R4-2202957 Email discussion summary for [101-bis-e][301] NR\_Repeater\_General**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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##### 6.5.1.1 System parameters

**R4-2200086 TP for TS 38.106:Clause 4 general**

*Type: pCR For: Approval  
 38.106 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

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

**R4-2200087 TP for TS 38.106:Clause 5 operating bands**

*Type: pCR For: Approval  
 38.106 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

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

**R4-2200089 Discussion of co-location requirements for multi-band repeaters**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200818 Discussion on co-located requirements for FR1 NR repeater**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2201289 Discussion on co-location requirement for multi-band repeaters**

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

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

##### 6.5.1.2 Repeater Class/Type

##### 6.5.1.3 TDD repeater switching requirements

**R4-2200090 Discussion of TDD switching requirements**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200091 TP for TS 38.106:ON OFF mask**

*Type: pCR For: Approval  
 38.106 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

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

**R4-2200821 Discussion on switching requirements**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2201290 Discussion on repeater switching requirement and power transients**

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

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

**R4-2201526 Repeaters TDD aspects**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Remaining aspects for TDD switching

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

**R4-2201544 Discussion on repeater switching requirements**

*Type: other For: Approval  
 Source: NEC*

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

**R4-2201656 TDD repeater switching requirements**

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

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

##### 6.5.1.4 Others

**R4-2200088 Proposal to remove Annex A from the core spec**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2201529 Draft TP to TS 38.106: Frequency stability and out of band gain requirements**

*Type: pCR For: Approval  
 38.106 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Draft spec text according to work split

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

**R4-2201657 Reference points and regional requirements for NR repeaters**

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

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

**R4-2201932 Repeater OTA declarations and specification points**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss how to specify the repeater OTA interface

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

#### 6.5.2 Conductive RF core requirements

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**Email discussion for [101-bis-e][302] NR\_Repeater\_RF\_Part1, AI 6.5.2– Chunxia Guo**

**R4-2202958 Email discussion summary for [101-bis-e][302] NR\_Repeater\_RF\_Part1**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2201930 TP to TS 38.106 6.1 and 6.2**

*Type: pCR For: Approval  
 38.106 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

TP to TS for allocated conducted section 6.1 general and 6.2 repeater output power

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

##### 6.5.2.1 Transmitted power related requirements

**R4-2200178 Views on the requirements to avoid interference of NR repeater for UL**

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

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

**R4-2200822 Discussion on repeater power related conducted requirements**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2201459 Further discussions on power related requirements for conducted repeater**

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

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

**R4-2201532 Repeater conducted power requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Open issues for power requirements

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

**R4-2201658 Conducted power related requirements consideration for NR-Repeaters**

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

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

##### 6.5.2.2 Emission requirements

**R4-2200092 Discussion of remaining issues for FR1 emission requirements**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200823 Discussion on repeater emission related conducted requirements**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2201460 Further discussions on emission related requirements for conducted repeater**

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

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

**R4-2201528 Repeater conducted emissions requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Open issues for emissions requirements

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

**R4-2201654 TP to TS 38.106 clause 6.5 Unwanted emissions conducted**

*Type: pCR For: Approval  
 38.106 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201660 Repeater conducted unwanted emissions**

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

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

**R4-2201933 Repeater FR1 OOB gain and ACRR**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss list of assumptions in the WF for calculating OOB gain and ACRR requirements for FR1

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

**R4-2201935 FR1 inband passband OBUE requirements and NF requirements**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss inband OBUE requirement and their similarity with NF requirements.

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

##### 6.5.2.3 Others

**R4-2200093 Discussion of out of band gain and ACRR requirements for FR1**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200819 Discussion on other RF conducted requirements for NR repeater**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2200825 TP to TS 38.106 conducted EVM and input IMD**

*Type: pCR For: Approval  
 38.106 v0.0.0 CR- rev Cat: (Rel-17)  
  
 Source: CMCC*

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

**R4-2201461 Further discussions on other requirements of conducted repeater**

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

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

**R4-2201527 Repeater conducted requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Open issues for ACRR, OOB gain requirement

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

**R4-2201661 Low-power EVM and OOB gain considerations for FR1 NR Repeaters**

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

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

**R4-2201934 Discuss repeater co-location requirements**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss co-location with BS and/or repeaters as discuss din WF from last meeting

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

#### 6.5.3 Radiated RF core requirements

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**Email discussion for [101-bis-e][303] NR\_Repeater\_RF\_Part2, AI 6.5.3– Richard Kybett**

**R4-2202959 Email discussion summary for [101-bis-e][303] NR\_Repeater\_RF\_Part2**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2201931 TP to TS 38.106 9.1and 9.2**

*Type: pCR For: Approval  
 38.106 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Huawei*

**Abstract:**

TP to TS for allocated radiated section 9.1 general and 9.2 repeater output power

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

##### 6.5.3.1 Transmitted power related requirements

**R4-2201462 Further discussions on power related requirements for conducted repeater**

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

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

**R4-2201659 Radiated power related requirements consideration for NR-Repeaters**

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

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

##### 6.5.3.2 Emission requirements

**R4-2200824 Discussion on repeater emission related radiated requirements**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2201463 Further discussions on emission related requirements for radiated repeater**

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

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

**R4-2201531 Repeaters radiated emissions requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Open issues for power requirement

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

**R4-2201655 TP to TS 38.106 clause 7.5 Unwanted emissions radiated**

*Type: pCR For: Approval  
 38.106 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201662 Repeater radiated unwanted emissions**

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

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

**R4-2201936 FR2 inside passband OBUE requirement and NF**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss the inband OBUE and noise figure requirements for the FR2 repeater

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

**R4-2201937 Repeater FR2 OOB gain and ACRR**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss list of assumptions in the WF for calculating OOB gain and ACRR requirements for FR2

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

##### 6.5.3.3 Others

**R4-2200094 Discussion of out of band gain and ACRR requirements for FR2**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200820 Discussion on other RF radiated requirements for NR repeater**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2200826 TP to TS 38.106 radiated EVM and input IMD**

*Type: pCR For: Approval  
 38.106 v0.0.0 CR- rev Cat: (Rel-17)  
  
 Source: CMCC*

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

**R4-2201464 Further discussions on other requirements of radiated repeater**

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

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

**R4-2201530 Repeaters radiated requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Propoals for other radiated requirements

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

**R4-2201663 Signal quality and OOB gain considerations for FR2 NR Repeaters**

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

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

**R4-2201938 FR2 input IM requirements**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss the FR2 input IM signals and levels.

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

#### 6.5.4 EMC core requirements

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**Email discussion for [101-bis-e][304] NR\_Repeater\_EMC, AI 6.5.4– Wubin Zhou**

**R4-2202960 Email discussion summary for [101-bis-e][304] NR\_Repeater\_EMC**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2200696 Discussion on test conditions and performance assessment for NR repeater EMC tests**

*Type: discussion For: (not specified)  
 Source: ZTE*

**Abstract:**

In this document, we give some initial discussion on some test issue for different type NR repeaters EMC based on some agreements of RF requirements.

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

**R4-2200697 TP to TS38.114: References**

*Type: pCR For: Approval  
 38.114 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE*

**Abstract:**

In this contribution, we provide a TP to TS38.114 for the Reference issue based on TS38.114V0.1.0.

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

**R4-2200730 TS38.114V0.2.0 to capture RAN4#101-bis agreements**

*Type: draft TS For: Approval  
 38.114 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE*

**Abstract:**

[Email Approval] To reflect the approved TP into TS 38.114 v0.2.0.

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

### 6.6 Introduction of DL 1024QAM for NR FR1

#### 6.6.1 General

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**Email discussion for [101-bis-e][305] NR\_DL1024QAM\_RF, AI 6.6.1,6.6.2,6.6.3,6.6.4– Thomas Chapman**

**R4-2202961 Email discussion summary for [101-bis-e][305] NR\_DL1024QAM\_RF**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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#### 6.6.2 UE RF requirements maintenance

#### 6.6.3 BS TX RF requirements maintenance

#### 6.6.4 BS RF conformance testing

**R4-2200134 Discussion on BS RF conformance testing for 1024QAM for NR FR1**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200135 Draft CR for 37.145-1 on BS RF conformance testing for 1024QAM for NR FR1**

*Type: draftCR For: Endorsement  
 37.145-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: CATT*

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

**R4-2201458 Draft CR to TS 38.141-1: Introduction of 1024 QAM in FR1**

*Type: draftCR For: Endorsement  
 38.141-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

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

**R4-2201489 CR to TS 38.141-2: Introduction of 1024 QAM in FR1**

*Type: CR For: Endorsement  
 38.141-2 v17.4.0 CR-0380 rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Based upon agreed worksplit: R4-2106121. With inputs from WF on 1024 QAM conformance testsing (R4-2120659)

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

**R4-2201514 Test procedure for support of 1024QAM**

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

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

**R4-2201664 On 1024QAM for NR BS conformance tests**

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

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

**R4-2201665 Draft CR to TS 37.145-2 with 1024QAM introduction**

*Type: draftCR For: Approval  
 37.145-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

#### 6.6.5 Demodulation and CSI requirements

##### 6.6.5.1 General

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**Email discussion for [101-bis-e][312] NR\_DL1024QAM\_Demod\_NWM, AI 6.6.5– Jiakai Shi**

**R4-2202962 Email discussion summary for [101-bis-e][312] NR\_DL1024QAM\_Demod\_NWM**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2201427 Summary of PDSCH simulation results for DL 1024QAM in FR1**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This spread sheet summarizes the simulation results of PDSCH demodulation with DL 1024QAM.

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

**R4-2201719 Simulation Results and views on 1024QAM FR1 UE Demod Tests**

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

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

##### 6.6.5.2 PDSCH requirements

**R4-2200265 Discussion on PDSCH demod requirements with 1KQAM**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200376 Discussion on the PDSCH requirements for 1024QAM**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2201011 Discussion and simulation results on 1024QAM PDSCH**

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

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

**R4-2201428 UE demodulation requirements for DL 1024QAM**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issue of UE demodulation requirements for DL 1024QAM WI.

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

**R4-2201783 Discussion on PDSCH requirements for DL 1024QAM in FR1**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

##### 6.6.5.3 SDR requirements

**R4-2200266 Discussion on SDR requirements with 1KQAM**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2201012 Discussion and simulation results on 1024QAM SDR**

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

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

**R4-2201429 SDR requirements for DL 1024QAM**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues on SDR for DL 1024QAM.

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

**R4-2201784 Discussion on SDR requirements for DL 1024QAM in FR1**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

##### 6.6.5.4 CQI requirements

**R4-2201013 Discussion and simulation results on 1024QAM CSI**

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

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

**R4-2201430 CQI reporting requirements for DL 1024QAM**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues of CQI reporting requirements for DL 1024QAM.

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

### 6.8 Enhancement for NR high speed train scenario in FR1

#### 6.8.3 UE demodulation requirements (38.101-4)

##### 6.8.3.1 General

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**Email discussion for [101-bis-e][313] NR\_HST\_FR1\_Demod, AI 6.8.3– Xiaoran Zhang**

**R4-2202963 Email discussion summary for [101-bis-e][313] NR\_HST\_FR1\_Demod**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

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**Conclusion after 2nd round**

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**R4-2201422 Summary for FR1 HST demodulation results**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This spread sheet summarizes the simulation results of FR1 HST demodulation requirements.

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

##### 6.8.3.2 PDSCH requirements for CA scenarios

**R4-2200267 Discussion on PDSCH CA Requirements in HST**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200268 Draft CR on HST DPS CA requirements for 4Rx**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Apple*

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

**R4-2200364 Views on HST CA tests for FR1**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

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

**R4-2200521 Discussion on HST FR1 CA PDSCH performance requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200625 Draft CR on PDSCH requirements for HST-SFN CA requirements for 4Rx**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: CMCC*

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

**R4-2200633 Discussion on FR1 HST UE demodulation for CA scenario**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200835 Discussion on PDSCH requirements for CA scenarios**

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

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

**R4-2200998 Discussion on PDSCH CA scenarios for NR UE HST FR1 performance requirements**

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

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

**R4-2200999 Draft CR on HST FR1 DPS CA requirements for 2Rx (38.101-4)**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201423 PDSCH demodulation requirements for CA with HST-SFN scenario**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the open issues of the PDSCH demodulation requirements for CA with HST-SFN scenario.

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

**R4-2201424 draft CR: FRC for CA PDSCH demodulation requirements for HST**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This draft CR provides FRC used for PDSCH demodulation requirements for HST with CA.

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

**R4-2201876 draftCR to TS 38.101-4: HST-SFN CA requirements for 2Rx**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Intel Corporation*

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

**R4-2202006 Views on FR1 HST PDSCH CA Tests**

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

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

### 6.9 NR support for high speed train scenario in FR2

#### 6.9.2 High speed train deployment scenario in FR2

**R4-2201000 TP to TR 38.854 on Deployment Scenario Analysis for FR2 HST**

*Type: pCR For: Approval  
 38.854 v0.1.1 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201524 TP to TR 38.854: Coverage analysis**

*Type: pCR For: Approval  
 38.854 v0.1.1 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Capture coverage analysis in the TR

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

#### 6.9.5 Demodulation requirements

##### 6.9.5.1 General

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**Email discussion for [101-bis-e][314] NR\_HST\_FR2\_Demod\_Part1, AI 6.9.2, 6.9.5.1, 6.9.5.2– Yunchuan Yang**

**R4-2202964 Email discussion summary for [101-bis-e][314] NR\_HST\_FR2\_Demod\_Part1**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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| **Tdoc number** | **Title** | **Source** | **Comments** |
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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**R4-2200743 Simulation results summary for Rel-17 FR2 HST**

*Type: other For: Information  
 Source: Samsung*

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

**R4-2200744 CR work split for Rel-17 FR2 HST**

*Type: discussion For: Approval  
 Source: Samsung*

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

**R4-2201001 Discussion on general UE demodulation requirements for FR2 HST**

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

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

**R4-2201002 Draft CR on minimum requirements for PDSCH HST-DPS (38.101-4)**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201003 Draft CR on HST FR2 BS manufacturer's declarations and applicability rule (38.141-2)**

*Type: draftCR For: Endorsement  
 38.141-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

##### 6.9.5.2 UE demodulation requirements

**R4-2200629 Discussion on UE demodulation for FR2 HST**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2201718 Addressing open issues on FR2 HST UE Demodulation**

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

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

**R4-2201877 Views on FR2 HST PDSCH performance requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

###### 6.9.5.2.1 PDSCH requirements under Uni-directional scenario

**R4-2200746 Discussion and simulation results of PDSCH requirement with Uni-directional scenario for Rel-17 FR2 HST**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201004 Discussion on UE demodulation requirements for FR2 HST under Uni-directional scenario**

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

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

**R4-2201425 PDSCH demodulation requirements for HST FR2**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation requirements for HST FR2.

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

###### 6.9.5.2.2 PDSCH requirements under Bi-directional scenario

**R4-2200745 Discussion and simulation results of PDSCH requirement with Bi-directional scenario for Rel-17 FR2 HST**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2200837 PDSCH requirements under Bi-directional scenario**

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

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

**R4-2201005 Discussion on UE demodulation requirements for FR2 HST under Bi-directional scenario**

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

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

**R4-2201426 PDSCH demodulation requirements for HST FR2 bi-directional scenario**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the UE demodulation requirements for HST FR2 specific to the bi-directional scenario.

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

##### 6.9.5.3 BS demodulation requirements

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**Email discussion for [101-bis-e][315] NR\_HST\_FR2\_Demod\_Part2, AI 6.9.5.3– Axel Muller**

**R4-2202965 Email discussion summary for [101-bis-e][315] NR\_HST\_FR2\_Demod\_Part2**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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| **Tdoc number** | **Title** | **Source** | **Comments** |
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**Existing t-docs**

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**Conclusion after 2nd round**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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###### 6.9.5.3.1 PUSCH requirements

**R4-2200128 Discussion on PUSCH demodulation requirements for FR2 HST**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200129 Simulation results for PUSCH demodulation requirements for FR2 HST**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200747 Discussion and simulation results of PUSCH requirement for Rel-17 FR2 HST**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201006 Discussion on PUSCH demodulation requirements for FR2 HST**

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

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

**R4-2201522 HST PUSCH requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Remaining issues for PUSCH requirement

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

**R4-2201844 On HST FR2 PUSCH Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201878 Views on FR2 HST PUSCH performance requirements**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

###### 6.9.5.3.2 PUSCH with UL timing adjustment requirements

**R4-2200130 Simulation results for UL timing adjustment demodulation requirements for FR2 HST**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200748 Simulation results of UL timing adjustment requirement for Rel-17 FR2 HST**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201007 Discussion on PUSCH with UL timing adjustment requirements for FR2 HST**

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

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

**R4-2201523 PUSCH with UL timing adjustment requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Proposed TA requirement

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

**R4-2201845 On HST FR2 PUSCH UL Timing Adjustment Requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

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

###### 6.9.5.3.3 PRACH requirements

**R4-2200131 Simulation results for PRACH demodulation requirements for FR2 HST**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200749 Simulation results of PRACH requirement for Rel-17 FR2 HST**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201008 Discussion on PRACH demodulation requirements for FR2 HST**

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

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

**R4-2201009 Draft CR on PRACH minimum requirements for high speed train (38.104)**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201010 Draft CR on PRACH test requirement for high speed train (38.141-2)**

*Type: draftCR For: Endorsement  
 38.141-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201521 FR2 HST PRACH requirement**

*Type: discussion For: Discussion  
 Source: Ericsson*

### 6.12 Further enhancement on NR demodulation performance

#### 6.12.1 General

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**Email discussion for [101-bis-e][316] NR\_perf\_enh2\_Demod\_Part1, AI 6.12.1, 6.12.2.3– Shan Yang**

**R4-2202966 Email discussion summary for [101-bis-e][316] NR\_perf\_enh2\_Demod\_Part1**

*Type: other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**Email discussion for [101-bis-e][317] NR\_perf\_enh2\_Demod\_Part2, AI 6.12.2.1, 6.12.2.2– Belov Dmitry**

**R4-2202967 Email discussion summary for [101-bis-e][317] NR\_perf\_enh2\_Demod\_Part2**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**R4-2200017 Draft TR 38.833 v1.1.0: Further enhancement on NR demodulation performance**

*Type: draft TR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom*

**Abstract:**

For email approval after the meeting, i.e., to implement the TPs approved during the meeting.

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

**R4-2200018 TP to TR 38.833: Symbols and abbreviations**

*Type: pCR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom*

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

**R4-2200905 Updated work plan for Further enhancement on NR demodulation performance WI**

*Type: Work Plan For: Approval  
 Source: China Telecom*

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

**R4-2201603 Discussion on UE feature list and capability signalling for NR Demodulation Enhancements WI**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

#### 6.12.2 UE demodulation and CSI requirements

##### 6.12.2.1 MMSE-IRC receiver for inter-cell interference

###### 6.12.2.1.1 PDSCH requirements

**R4-2200269 Discussion on PDSCH requirements in intercell interference scenarios**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200270 Draft CR on PDSCH demod requirements in ICI-FDD**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: (Rel-17)  
  
 Source: Apple*

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

**R4-2200366 Views on MMSE-IRC receiver for inter-cell interference test**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

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

**R4-2200377 Discussion on the PDSCH requirements for scenarios with inter-cell inter-user interference**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2200500 On Intercell PDSCH MMSE-IRC demodulation requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open issues with relation to Intercell PDSCH MMSE-IRC demodulation requirements. We make proposals concerning Common test parameters and Interference model for scenario 1.

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

**R4-2200504 TP for 38.101-4 on NR Interference model for enhanced performance requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this TP we propose the structure for NR PUSCH performance requirements with CP-OFDM and FR1. Tables with test requirements are skeletons, an Interference model description for the NR UE enhanced performance requirements will be updated when agreements

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

**R4-2200512 Discussion on PDSCH demodulation MMSE-IRC requirements for scenario with inter-cell interference**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200513 Summary of PDSCH simulation results for inter-cell interference suppression**

*Type: other For: Information  
 Source: Intel Corporation*

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

**R4-2200795 Draft CR for TS38.101-4 PDSCH TDD demodulation requirements for inter-cell interference MMSE-IRC**

*Type: draftCR For: Approval  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: CMCC*

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

**R4-2200798 Discussion on R17 demodulation enhancement for inter-cell interference suppressing**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200902 On PDSCH requirements for UE MMSE-IRC receiver for inter-cell interference suppression**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200985 Discussion on Inter cell IRC demodulation requirements**

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

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

**R4-2200986 Simulation results for Inter cell IRC demodulation requirements**

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

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

**R4-2200988 Draft CR: Introduction of general and applicability section of inter-cell MMSE-IRC receiver in TS 38.101-4**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201215 Remaining issues on PDSCH requirement for inter-cell interference**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses PDSCH requirements for inter-cell IRC

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

**R4-2201216 Simulation results on PDSCH performance for inter-cell interference**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution submits our simulation results for PDSCH demodulation for inter-cell IRC

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

**R4-2201965 Views on Inter-cell Interference PDSCH Tests**

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

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

###### 6.12.2.1.2 CQI requirements

**R4-2200271 Discussion on CSI reporting requirements in intercell interference scenarios**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200378 Discussion on the CQI requirements for scenarios with inter-cell inter-user interference**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2200501 On CQI requirements for intercell interference MMSE-IRC**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open issues with relation to CQI requirements for intercell interference MMSE-IRC. We make proposals concerning Antenna configuration and Requirement definition.

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

**R4-2200514 Discussion on CSI MMSE-IRC requirements for scenario with inter-cell interference**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200799 Discussion on CQI requirements for inter-cell interference MMSE-IRC**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200901 On CSI requirements for UE MMSE-IRC receiver for inter-cell interference suppression**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200987 Discussion and simulations results for Inter cell IRC CSI**

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

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

**R4-2201217 Remaining issues on CSI reporting requirements for inter-cell interference**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses CSI reporting requirements for inter-cell IRC

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

**R4-2201218 Simulation results on CSI reporting for inter-cell interference**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution submits our simulation results for CSI reporting for inter-cell IRC

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

**R4-2201221 draftCR on CSI reporting test case(TDD)**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This draftCR introduce the new CSI reporting test case.

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

**R4-2201975 Views on Inter-cell Interference CQI Reporting Tests**

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

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

##### 6.12.2.2 MMSE-IRC receiver for intra-cell inter-user interference

**R4-2200272 Discussion on PDSCH requirements in MU-MIMO scenarios**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200379 Discussion on the PDSCH requirements for scenarios with intra-cell inter-user interference**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2200380 TP to TR 38.833 Scenario for inter-user interference suppression for MU-MIMO**

*Type: pCR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: MediaTek inc.*

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

**R4-2200515 Discussion on MMSE-IRC requirements for scenario with intra-cell inter-user interference**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200516 TP to TR 38.833: Link level simulation results for Inter-user interference suppression for MU-MIMO**

*Type: pCR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Intel Corporation*

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

**R4-2200800 Discussion on R17 demodulation enhancement for intra-cell inter-user interference suppressing**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200807 TP to TR 38.833: Summary of link level evaluation for inter-user interference suppression for MU-MIMO**

*Type: pCR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: CMCC*

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

**R4-2200903 Views on UE MMSE-IRC receiver for intra-cell inter-user interference suppression**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200904 TP to TR 38.833: Updated conclusion for phase I evaluation on inter-user interference suppression for MU-MIMO scenario**

*Type: pCR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: China Telecom*

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

**R4-2200989 TP to TR 38.833: Introduction of simulation assumptions of intra cell inter user MMSE-IRC receiver**

*Type: pCR For: Approval  
 38.833 v1.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2200990 Discussions on intra-cell inter user MMSE-IRC receiver**

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

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

**R4-2200991 Simulation results for intra cell inter user MMSE IRC receiver**

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

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

**R4-2200992 Draft CR: Introduction of MU-MIMO Beamforming model in TS 38.101-4**

*Type: draftCR For: Endorsement  
 38.101-4 v17.3.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2200993 Summary of simulation results for intra cell inter user MMSE receiver requirements**

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

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

**R4-2201219 Remaining issues on MMSE-IRC receiver for intra-cell inter-user interference**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses PDSCH requirements for MU-MIMO

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

**R4-2201220 Simulation results on PDSCH performance for intra-cell inter-user interference**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution submits our simulation results for PDSCH demodulation for intra-cell inter-user IRC

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

**R4-2201966 Views on Intra-cell Inter-user Interference Scenarios**

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

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

##### 6.12.2.3 CRS-IM receiver in scenarios with overlapping spectrum for LTE and NR

**R4-2201964 Views on CRS Interference Mitigation in NR**

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

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

###### 6.12.2.3.1 General

**R4-2200273 Discussion on CRS-IM with 30KHz SCS**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200502 On Receiver Assumptions for CRS-IM**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open issues with relation to the receiver assumptions for CRS-IM.

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

**R4-2200517 General discussion on CRS-IM requirements for scenarios with overlapping spectrum for LTE and NR**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200801 Discussion on the receiver for CRS-IM**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200898 Discussion on the receiver assumption for CRS-IM requirement definition**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200982 Discussion on CRS-IM receiver for 30kHz SCS**

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

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

**R4-2201414 CRS-IM receiver in scenarios with overlapping spectrum for LTE and NR**

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

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

**R4-2201415 Simulation results on CRS-IM receiver**

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

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

**R4-2201418 Discussion on remaining issues of receiver assumption for CRS-IM**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discuss the remaining open issues of receiver assumption for CRS-IM

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

###### 6.12.2.3.2 Necessity of Network assistant signaling

**R4-2200274 Discussion on Network Assistance for CRS-IM in NR**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200381 Views on the network assistance signalling for CRS-IM receiver**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2200503 On Necessity of Network assistant signaling for CRS-IM**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on the open issues for the subject of “Necessity of Network Assistant Signalling”. In addition, we have provided a proposal for a level of NWA, which we see as a compromise based on the previous RAN4 discuss

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

**R4-2200518 Network assistant signaling for CRS-IM receiver for scenarios with overlapping spectrum for LTE and NR**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200802 Discussion on the network assistant signaling necessity for CRS-IM**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200899 Discussion on the necessity of network assistance signalling for CRS-IM**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200984 Discussion on necessity of NWA on CRS-IM receiver for 15kHz SCS**

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

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

**R4-2201416 Discussion on the network assistance signalling for CRS-IM**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the necessity of introducing the network asisstance signaling with additional simulations

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

**R4-2201417 Simulation results for CRS interference handling**

*Type: other For: Information  
 Source: Ericsson*

**Abstract:**

This contribution summarizes the additional simulations for information

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

###### 6.12.2.3.3 Test set-up

**R4-2200275 Discussion on Test setup for CRS-IM requirements**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200519 Test setup for CRS-IM receiver for scenarios with overlapping spectrum for LTE and NR**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200803 Discussion on the test setup for CRS-IM**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200900 Discussion on the test setup for CRS-IM requirement definition**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200983 Discussion on test setup on CRS-IM receiver for 15kHz SCS**

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

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

**R4-2201419 Discussion on the remaining issues of test setup for CRS-IM**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the remaining open issues of test setup for CRS-IM

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

**R4-2201601 On test setup for CRS-IM**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have provided our views on various open issues with relation to the Test Setup for CRS-IM. We make proposals concerning the area of Interference Model and Common parameters for target and interfering cells.

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

#### 6.12.3 BS demodulation requirements

##### 6.12.3.1 PUSCH demodulation requirements for FR1 256QAM

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**Email discussion for [101-bis-e][318] NR\_perf\_enh2\_Demod\_Part3, AI 6.12.3– Tricia Li**

**R4-2202968 Email discussion summary for [101-bis-e][318] NR\_perf\_enh2\_Demod\_Part3**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**R4-2200132 Draft CR for TS 38.141-1 on manufacture declaration for FR1 PUSCH 256QAM performance requirements**

*Type: draftCR For: Endorsement  
 38.141-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: CATT*

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

**R4-2200133 Simulation results for FR1 PUSCH 256QAM performance requirement**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200148 Draft CR for TS 38.141-2, Introduction of manufacture declaration, MU and TT for FR1 PUSCH 256QAM performance requirements**

*Type: draftCR For: Endorsement  
 38.141-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: CATT*

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

**R4-2200474 draftCR for 38.141-1 MU and TT for PUSCH with 256QAM**

*Type: draftCR For: Endorsement  
 38.141-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Measurement uncertainty and test torlerance for PUSCH with 256QAM

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

**R4-2200520 Draft CR for TS 38.104: FR1 256QAM PUSCH requirements**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: F (Rel-17)  
  
 Source: Intel Corporation*

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

**R4-2200752 draft CR on FR1 PUSCH 256QAM FRC for TS 38.104**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Samsung*

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

**R4-2200753 draft CR on FR1 PUSCH 256QAM FRC for TS 38.141-1**

*Type: draftCR For: Endorsement  
 38.141-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Samsung*

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

**R4-2200754 draft CR on FR1 PUSCH 256QAM FRC for TS 38.141-2**

*Type: draftCR For: Endorsement  
 38.141-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Samsung*

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

**R4-2200755 Simulation results for FR1 PUSCH with 256QAM**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2200796 Draft CR for TS38.141-2 Requirements for PUSCH with transform precoding disabled for BS type 1-O**

*Type: draftCR For: Approval  
 38.141-2 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: CMCC*

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

**R4-2200838 Simulation results for FR1 UL 256QAM demodulation requirement**

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

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

**R4-2201018 Updated simulation results for FR1 PUSCH 256QAM performance requirements**

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

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

**R4-2201019 Summary of simulation results for FR1 PUSCH 256QAM performance requirements**

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

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

**R4-2201020 draftCR: Introduction of conformance testing for FR1 PUSCH 256QAM with transform precoding disabled in TS 38.141-1**

*Type: draftCR For: Endorsement  
 38.141-1 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**R4-2201801 Simulation results for FR1 UL 256QAM demodulation requirement**

*Type: discussion For: Discussion  
 Source: ZTE Wistron Telecom AB*

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

**R4-2201802 draftCR on FR1 PUSCH 256QAM FRC for TS 38.104**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: (Rel-17)  
  
 Source: ZTE Wistron Telecom AB*

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

### 6.13 Solutions for NR to support non-terrestrial networks (NTN)

#### 6.13.1 General

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**Email discussion for [101-bis-e][306] NTN\_Solutions\_Part1, AI 6.13.1– Dorin Panaitopol**

**R4-2202969 Email discussion summary for [101-bis-e][306] NTN\_Solutions\_Part1**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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**R4-2201170 Draft text proposal to update TR 38.863**

*Type: discussion For: Approval  
 Source: Samsung*

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

**R4-2201991 Considerations for TS 38.101-5 development**

*Type: discussion For: Discussion  
 Source: MediaTek (Chengdu) Inc.*

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

##### 6.13.1.1 System parameters

**R4-2200162 On remaining open issue for NTN system parameters**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2200163 TP to TR 38.863 on channel raster and sync raster**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

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

**R4-2200478 TP to TR 38.863 on operating bands and channel bandwidth**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

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

**R4-2200479 TP to TR 38.863 on transmitter characteristics for satellite access node**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: CATT*

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

**R4-2201074 On NTN System parameters**

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

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

**R4-2201257 TP for 38.863 on system parameters to clarify “NTN satellite bands”**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2201989 NTN system parameters remaining issues for n255**

*Type: discussion For: Discussion  
 Source: MediaTek (Chengdu) Inc.*

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

##### 6.13.1.2 NTN Satellite Access Node Class/Type

**R4-2201465 Further discussion on NTN gNB class**

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

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

**R4-2200165 Satellite Access Node Class/Type**

*Type: discussion For: Discussion  
 Source: CATT*

Session chair note: Move to this AI from AI 6.3.2.2

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

##### 6.13.1.3 Regulatory information

**R4-2201075 TP to TR 38.863 on regulatory aspects for HAPS**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201314 NTN - Regulatory information - TP to TR 38.863**

*Type: pCR For: Approval  
 38.863 v0.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

This TP is suggesting text for the Regulatory section in TR 38.863

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

##### 6.13.1.4 Others

**R4-2200363 Considerations on HAPS specific technical requirements**

*Type: discussion For: Discussion  
 Source: SoftBank Corp., KDDI Corporation, Intelsat*

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

**R4-2201076 TP to TR 38.863 on general aspects**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201263 Draft skeleton for TS 38.101-5**

*Type: discussion For: Approval  
 38.101-5 v CR- rev Cat: (Rel-17)  
  
 Source: Samsung*

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

**R4-2201288 Draft skeleton for TS 38.101-5**

*Type: draft TS For: Approval  
 38.101-5 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: Samsung*

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

**R4-2201315 NTN - General aspects related to BS and UE requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This TP is discussing general aspects when capturing requirements in BS and UE RF requirements

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

**R4-2201830 Skeleton for TS 38.108 NR Satellite Access Node radio transmission and reception v0.0.1**

*Type: draft TS For: Approval  
 38.108 v0.0.1 CR- rev Cat: (Rel-17)  
  
 Source: THALES*

**Abstract:**

The attached skeleton is based on previous approved Way Forwards in RAN4#100-e (R4-2115641) and RAN4#101-e (R4-2120674, R4-2120675), as well as other RAN4#101-bis-e pre-meeting discussions. For further information please also check the Way Forwards on NTN

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

**R4-2201838 Draft proposal to update TR 38.863 NTN related RF and co-existence aspects**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: THALES*

**Abstract:**

This pCR is to provide B2 (Annex) Calibration Results of TN components with THALES calibration information provided prior to RAN4#101-e meeting before Sept. 30 2021, together with new variance and mean values.

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

#### 6.13.2 Coexistence aspects

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**Email discussion for [101-bis-e][307] NTN\_Solutions\_Part2, AI 6.13.2– Yiran Jin**

**R4-2202970 Email discussion summary for [101-bis-e][307] NTN\_Solutions\_Part2**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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##### 6.13.2.1 NTN coexistence scenarios and simulations

**R4-2200164 NTN coexistence simulations**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2200781 Coexistence simulation results for TN-NTN**

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

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

**R4-2201072 NR-NTN co-ex study results**

*Type: discussion For: Approval  
 Source: Samsung*

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

**R4-2201124 Collected NR-NTN co-ex results**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201222 Simulation result for coexistence study on NR to support non-terrestrial networks**

*Type: discussion For: Information  
 Source: Xiaomi*

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

**R4-2201255 NR NTN co-existence simulation Results**

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

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

**R4-2201262 NTN coexistence results and observations**

*Type: discussion For: Discussion  
 Source: MediaTek (Chengdu) Inc.*

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

**R4-2201316 NTN - Coexistence simulation results**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides our simulation results based on the agreed assumptions

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

**R4-2201466 Simulation results for NTN coexistence study**

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

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

**R4-2201842 NTN Simulation Assumptions**

*Type: discussion For: Discussion  
 Source: THALES*

**Abstract:**

In this contribution we propose to discuss and modify some TN-NTN coexistence simulation assumptions/simulation methodologies from previous RAN4 meetings (see for example RAN4#101-e with approved R4-2120670, R4-2120671).

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

**R4-2201843 NTN coexistence calibration data - THALES 28\_09\_2021**

*Type: discussion For: Information  
 Source: THALES*

**Abstract:**

The Excel file with NTN calibration data provided by THALES prior to RAN4#101-e meeting (Nov. 2021). The document is for information only.

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

**R4-2201852 NR-NTN coexistence results - THALES updates 10\_01\_2022**

*Type: discussion For: Information  
 Source: THALES*

**Abstract:**

The Excel file contains TN-NTN coexistence results provided by THALES prior to RAN4#101-bis-e meeting (10th of January 2022). The contribution is for information purpose only.

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

##### 6.13.2.2 HAPS coexistence scenarios and simulations

**~~R4-2200165 Satellite Access Node Class/Type~~**

*~~Type: discussion For: Discussion  
 Source: CATT~~*

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

**R4-2200782 Coexistence simulation restuls for HAPS**

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

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

**R4-2201077 HAPS simulation assumptions for coexistence study**

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

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

**R4-2201078 TP to TR 38.863 on HAPS coexistence study**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**R4-2201254 Discussion on HAPS requirements**

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

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

##### 6.13.2.3 ACLR/ACS proposals

**R4-2200166 ACLR/ACS proposal**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2201079 ACLR and ACS proposal for HAPS**

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

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

**R4-2201126 NR-NTN co-ex results analysis and ACLR ACS proposal**

*Type: discussion For: Approval  
 Source: Samsung*

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

**R4-2201127 Draft Text Proposal for TR 38.863 Chapter 6.3 and 6.4**

*Type: discussion For: Approval  
 Source: Samsung*

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

**R4-2201256 Discussion on ACLR and ACS for NR NTN**

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

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

**R4-2201317 NTN - ACLR/ACS proposals**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

Based on our simulation results, this contribution is proposing ACLR and ACS limits for NTN satellite access node and NTN UE.

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

**R4-2201467 Discussion on ACLR and ACS requirements for NTN**

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

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

**R4-2201839 TN-NTN Coexistence Results Updates**

*Type: discussion For: Agreement  
 Source: THALES, Magister Solutions Ltd*

**Abstract:**

New results based on new methodology from R4-2120671 (simulation assumptions RAN4#101-e), R4-2120670 (WF NTN\_Solutions\_Part2 RAN4#101-e).

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

#### 6.13.3 Satellite Access Node RF requirements

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**Email discussion for [101-bis-e][308] NTN\_Solutions\_Part3, AI 6.13.3, 6.13.4– Yuexia Song**

**R4-2202971 Email discussion summary for [101-bis-e][308] NTN\_Solutions\_Part3**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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| **Tdoc number** | **Title** | **Source** | **Comments** |
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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**R4-2200167 Remaining issue for satellite access node RF requirement - Tx part**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2200168 Remaining issue for satellite access node RF requirement - Rx part**

*Type: discussion For: Discussion  
 Source: CATT*

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

**~~R4-2201206 Discussion on RRM requirements for eIAB~~**

*~~Type: discussion For: Discussion  
 Source: Huawei, Hisilicon~~*

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

**~~R4-2201207 Draft CR on timing requirements for Rel-17 IAB~~**

*~~Type: draftCR For: Endorsement  
 38.174 v16.5.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei, Hisilicon~~*

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

Session Chair Note: R4-2201206/1207 moved to RRM session AI 6.17.3

##### 6.13.3.1 TX requirements for radiated characteristics

**R4-2200169 Discussion on NTN BS RF requriement for type 1-O - Tx part**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2201258 Discussion on UE Tx requirements for satellite access**

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

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

**R4-2201260 TP for 38.863 on UE transmitter characteristics for satellite access**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2201468 Discussion on radiated Tx requirements of satellite access node**

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

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

**R4-2201816 Discussion on Satellite Access Node radiated RF requirements: Tx**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide further discussion on the radiated Tx requirements for the Satellite Access Node.

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

**R4-2201320 NTN - Satellite Node Access - OTA Tx requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses Satellite node access - OTA Tx requirements

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

##### 6.13.3.2 RX requirements for radiated characteristics

**R4-2200170 Discussion on NTN BS RF reqruiement for type 1-O - Rx part**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2201259 Discussion on UE Rx requirements for satellite access**

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

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

**R4-2201261 TP for 38.863 on UE Receiver characteristics for satellite access**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2201469 Discussion on radiated Rx requirements of satellite access node**

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

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

**R4-2201817 Discussion on Satellite Access Node radiated RF requirements: Rx**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide further discussion on the radiated Rx requirements for the Satellite Access Node.

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

**R4-2201321 NTN - Satellite Node Access - OTA Rx requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses Satellite node access - OTA Rx requirements

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

##### 6.13.3.3 Tx requirements for conducted characteristics

**R4-2201318 NTN - Satellite Node Access - Tx requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses Satellite node access - Tx requirements

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

**R4-2201470 Discussion on conducted Tx requirements of satellite access node**

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

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

**R4-2201818 Discussion on Satellite Access Node conducted RF requirements: Tx**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide further discussion on the conducted Tx requirements for the Satellite Access Node.

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

**R4-2201819 Discussion on 64QAM support for the Satellite Access Node operation in FR1**

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

**Abstract:**

In this contribution we provide simulation results and related discussion to justify the performance gains of DL 64QAM support for the NTN Satellite Access Node operation in FR1.

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

##### 6.13.3.4 Rx requirements for conducted characteristics

**R4-2201471 Discussion on conducted RF requirements from satellite network perspective**

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

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

**R4-2201820 Discussion on Satellite Access Node conducted RF requirements: Rx**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide further discussion on the conducted Rx requirements for the Satellite Access Node.

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

**R4-2201319 NTN - Satellite Node Access - Rx requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses Satellite node access - Rx requirements

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

#### 6.13.4 UE RF requirements

##### 6.13.4.1 TX requirements

**R4-2200073 Further discussion on UE Tx RF requirements for NTN**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2200331 Discussion on UE TX requirements for NTN**

*Type: discussion For: Approval  
 38.101-5 v CR- rev Cat: (Rel-17)  
  
 Source: Mediatek India Technology Pvt.*

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

**R4-2200783 Considerations on NTN UE Tx requirements**

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

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

**R4-2201310 Discussion on UE Tx requirements for satellite access**

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

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

**R4-2201312 TP for 38.863 on UE transmitter characteristics for satellite access**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2201322 NTN - UE - Tx requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses UE - Tx requirements

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

**R4-2201472 Discussion on NTN UE Tx RF requirements**

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

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

##### 6.13.4.2 RX requirements

**R4-2200074 Further discussion on UE Rx RF requirements for NTN**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2200332 Discussion on UE RX requirements for NTN**

*Type: discussion For: Approval  
 38.101-5 v CR- rev Cat: (Rel-17)  
  
 Source: Mediatek India Technology Pvt.*

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

**R4-2200784 Considerations on NTN UE Rx requirements**

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

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

**R4-2201223 TP for 38.863 on maximum input power for NTN UE**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Xiaomi*

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

**R4-2201224 Discussion on Maximum input level for NTN UE**

*Type: other For: Approval  
 Source: Xiaomi*

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

**R4-2201311 Discussion on UE Rx requirements for satellite access**

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

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

**R4-2201313 TP for 38.863 on UE Receiver characteristics for satellite access**

*Type: pCR For: Approval  
 38.863 v0.1.0 CR- rev Cat: (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**R4-2201323 NTN - UE - Rx requirements**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

This contribution discusses UE - Rx requirements

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

**R4-2201473 Discussion on NTN UE Rx RF requirements**

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

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

#### 6.13.6 Demodulation requirements

##### 6.13.6.1 General

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**Email discussion for [101-bis-e][322] NR\_NTN\_Demod\_NWM, AI 6.13.6– Bin Han**

**R4-2202972 Email discussion summary for [101-bis-e][322] NR\_NTN\_Demod\_NWM**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**R4-2200475 Discussion on general issue for NTN NR**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

General issue discussion for NTN NR

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

##### 6.13.6.2 Satellite Access Node demodulation requirements

**R4-2200171 Discussion on Satellite Access Node demodulation requirements**

*Type: discussion For: Discussion  
 Source: CATT*

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

**R4-2200476 Discussion on satellite access node demodulation requirement for NTN NR**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Satellite access node demodulation issue discussion for NTN NR

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

**~~R4-2201015 Discussion on UE NTN demod~~**

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

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

**R4-2201785 Discussion on Satellite Access Node demodulation requirements for NR NTN**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2201016 Discussion on satellite NTN demod**

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

Session Chair Note: Move to this AI from AI 6.13.6.3

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

##### 6.13.6.3 UE demodulation requirements

**~~R4-2201016 Discussion on satellite NTN demod~~**

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

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

**R4-2201420 Discussion on UE demodulation for NTN**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution discusses the general aspects for UE demodulation for NTN

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

**R4-2201786 Discussion on UE demodulation requirements for NR NTN**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2201015 Discussion on UE NTN demod**

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

Session chair note: move to this AI from AI 6.13.6.2

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

### 6.16 Extending current NR operation to 71GHz

#### 6.16.4 BS RF requirements

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**Email discussion for [101-bis-e][309] NR\_exto71GHz\_BSRF, AI 6.16.4– Toni lahteensuo**

**R4-2202973 Email discussion summary for [101-bis-e][309] NR\_exto71GHz\_BSRF**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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##### 6.16.4.1 TX requirements

**R4-2200136 Discussion on BS TX RF requirements for 52 6-71GHz**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200411 Proposals on BS transmitter requirements for extending current NR operation to 71 GHz**

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

**Abstract:**

This contribution provides further proposals on BS transmitter requirements for extending current NR operation to 71 GHz according to the approved WF and the findings in the corresponding study item as recorded in TR 38.808.

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

**R4-2200414 Draft CR to TR 38.104: Clauses 9.1 to 9.5**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Required changes to clauses 9.1 to 9.5 for extending current NR operation to 71 GHz

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

**R4-2200843 On BS RF transmitter requirements for the frequency range 52 to 71 GHz**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we present an overview of BS transmitter requirements, additional information and some proposals necessary to progress the work related to defining RF core requirements for the NR extension up to 71 GHz. To further stimulate the discu

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

**R4-2200845 Draft CR to TS 38.104: Addition of requirements for NR extension up to 71 GHz in subclause 9.6 to 9.8**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

As part of the work to extend NR frequency range up to 71 GHz this draft CR adds requirements to subclauses 9.6 to 9.8. Additions will be collected in a “big” CR for the complete update of TS 38.104.

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

**R4-2201456 Further discussion on BS Tx requirements for 52.6-71GHz**

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

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

**R4-2201821 Discussion on the remaining BS RF requirements for FR2-2: Tx requirements**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide further inputs to the discussion on the BS RF transmitter requirements for the NR operation in FR2-2.

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

##### 6.16.4.2 RX requirements

**R4-2200137 Discussion on BS RX RF requirements for 52 6-71GHz**

*Type: other For: Approval  
 Source: CATT*

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

**R4-2200151 Draft CR for TS 38.104 on introduction of BS RF Rx requirements for 57-71GHz in section 10.1 – 10.5**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: CATT*

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

**R4-2200412 Proposals on BS receiver requirements for extending current NR operation to 71 GHz**

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

**Abstract:**

This contribution provides further proposals on BS receiver requirements for extending current NR operation to 71 GHz according to the approved WF and the findings in the corresponding study item as recorded in TR 38.808.

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

**R4-2200844 On BS RF receiver requirements for the frequency range 52 to 71 GHz**

*Type: other For: Approval  
 Source: Ericsson*

**Abstract:**

In this contribution we continue the discussion from [2] on BS RF receiver requirements relevant for the NR extension to support up to 71 GHz. The contribution presents an overview of base station receiver requirement changes compared to current version o

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

**R4-2201457 Further discussion on BS Rx requirements for 52.6-71GHz**

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

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

**R4-2201822 Discussion on the remaining BS RF requirements for FR2-2: Rx requirements**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

In this contribution we provide further inputs to the discussion on the BS RF receiver requirements for the NR operation in FR2-2.

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

**R4-2201823 Draft CR to TS 38.104: implementation of FR2-2 requirements: FRC annex**

*Type: draftCR For: Endorsement  
 38.104 v17.4.0 CR- rev Cat: B (Rel-17)  
  
 Source: Huawei*

**Abstract:**

Draft CR to TS 38.104 fot the FRC annex.

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

### 6.17 Enhancements to Integrated Access and Backhaul (IAB) for NR

#### 6.17.1 General

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**Email discussion for [101-bis-e][310] NR\_eIAB, AI 6.17.1, 6.17.2– Yankun Li**

**R4-2202974 Email discussion summary for [101-bis-e][310] NR\_eIAB**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2201702 LS response on range of power control parameters for eIAB**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present LS response on power control parameters

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

#### 6.17.2 RF requirements

##### 6.17.2.1 Impact for Simultaneous operation of IAB child and parent links

**R4-2200936 Specification impact due to IAB simultaneous operation**

*Type: other For: Approval  
 Source: Samsung*

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

**R4-2201595 RF requirements due to Tx power imbalance between IAB-MT and IAB-DU**

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

**Abstract:**

In this contribution power imbalance between IAB-MT and IAB-DU is discussed in it is proposed how to capture the restrictions to core specifications.

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

**R4-2201700 RF core specification impact for Simultaneous operation of DU and MT**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on RF core spec for simultaneous operation of DU and MT

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

##### 6.17.2.2 Impact for Timing enhancement

**R4-2200839 Discussion on timing issues for simultaneous operation of IAB**

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

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

**R4-2200937 Discussion on timing enhancement**

*Type: other For: Approval  
 Source: Samsung*

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

**R4-2201596 Discussion on timing error for eIAB**

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

**Abstract:**

In this contribution we further discuss issue of IAB timing error between IAB-DU and IAB-MT and propose how to specify the requirements.

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

**R4-2201701 IAB MT /DU case 6 timing**

*Type: discussion For: Approval  
 Source: Ericsson*

**Abstract:**

In this paper, we present our view on RF impact on simultaneous operation of DU and MT.

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

**R4-2201939 eIAB Timing error between MT TX and DU TX**

*Type: discussion For: Discussion  
 Source: Huawei*

**Abstract:**

Discuss the open issue on the IAB MT Tx to DU TX timing error.

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

##### 6.17.2.3 Others

**R4-2200938 Discussion on range of power control parameters for Rel-17 eIAB**

*Type: other For: Approval  
 Source: Samsung*

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

**R4-2201597 Draft reply LS to RAN1 on Power control parameters**

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

**Abstract:**

RAN1 has sent a LS to RAN4 asking RAN4 to provide recommendation on min and max values for the desired DL Tx power adjustment, the actual DL Tx power adjustment and the desired UL Tx PSD range. In this contribution we discuss these and provide a draft rep

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

### 6.18 NR coverage enhancements

#### 6.18.3 BS demodulation requirements

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**Email discussion for [101-bis-e][319] NR\_cov\_enh\_Demod\_NWM, AI 6.18.3– Jingzhou Wu**

**R4-2202975 Email discussion summary for [101-bis-e][319] NR\_cov\_enh\_Demod\_NWM**

*Type: other For: Information  
 Source: Moderator (China Telecom)*

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**R4-2200025 BS demodulation requirements for NR coverage enhancements**

*Type: discussion For: Discussion  
 Source: China Telecom*

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

**R4-2200408 BS demodulation requirements for NR coverage enhancements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution, we have provided an overview of NR coverage enhancements features and scenarios with a potential impact on the receiver demodulation performance.

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

**R4-2200477 Discussion on BS demodulation requirements for NR coverage enhancement**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

BS demodulatlion discussion for NR coverage enhancement

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

**R4-2200756 View on demodulation requirement for Rel-17 coverage enhancement**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201017 Discussion on BS coverage enhancement demod**

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

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

**R4-2201604 Discussion on scope of BS demodulation requirements for NR coverage enhancements WI**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

### 6.19 Further enhancements on MIMO for NR

#### 6.19.4 UE Demodulation and CSI requirements

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**Email discussion for [101-bis-e][320] NR\_FeMIMO\_Demod\_NWM, AI 6.19.4— Yunchuan Yang**

**R4-2202976 Email discussion summary for [101-bis-e][320] NR\_FeMIMO\_Demod\_NWM**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Existing t-docs**

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**Conclusion after 2nd round**

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**R4-2200280 On scope of demod requirements for FeMIMO**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200365 Views on Rel-17 HST-SFN scheme 1**

*Type: discussion For: Discussion  
 Source: NTT DOCOMO, INC.*

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

**R4-2200522 Discussion on demodulation performance requirements definition for Rel-17 NR feMIMO**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2200644 Discussion on demodulation requirements for enhancement to support HST-SFN**

*Type: discussion For: Discussion  
 Source: CMCC*

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

**R4-2200767 Overview and work plan on performance requirements of Rel-17 FeMIMO WI**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2201014 Discussion on UE FeMIMO demod**

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

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

**R4-2201421 Discussion on UE demodulation and CSI requirement for FeMIMO**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution goes through all the new features of FeMIMO studied in RAN1 that are related to RAN4 UE demodulation, and proposes to define several requirements.

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

**R4-2201841 Views on FeMIMO Tests**

*Type: discussion For: Discussion  
 Source: Qualcomm CDMA Technologies*

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

**R4-2201922 On UE Demodulation and CSI requirements for feMIMO**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution we have presented Nokia’s point of view concerning the CSI reporting performance requirement impact of the Rel-17 “further enhanced type II port selection codebook”, after giving some background on the new features and inner workings

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

### 6.20 Support of reduced capability NR devices

#### 6.20.1 General

**R4-2200407 On NR RedCap general BS demodulation performance requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution, we have provided an overview of RedCap-related features and scenarios. We see that there is no potential impact on the BS demodulation performance.

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

#### 6.20.4 UE demodulation and CSI requirements

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**Email discussion for [101-bis-e][321] NR\_RedCap\_Demod\_NWM, AI 6.20.4, 6.20.1 (R4-2200407)– Kazuyoshi Uesaka**

**R4-2202977 Email discussion summary for [101-bis-e][321] NR\_RedCap\_Demod\_NWM**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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**Conclusion after 2nd round**

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**R4-2200281 On impact to demod requirements for Reduced capability devices in NR**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2200382 Views on UE demodulation requirements for RedCap**

*Type: discussion For: Discussion  
 Source: MediaTek inc.*

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

**R4-2200406 On NR RedCap general UE demodulation and CSI performance requirements**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

In this contribution, we have provided an overview of RedCap-related features with their potential impact on the UE demodulation and CSI performance requirements.

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

**R4-2200816 On UE demodulation and CSI requirements for RedCap UE**

*Type: discussion For: Decision  
 Source: CMCC*

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

**R4-2200994 Discussion on UE demodulation and CSI requirements for RedCap**

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

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

**R4-2201435 Work plan for UE demodulation requirements for RedCap**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution proposes the work plan of the demodulation performance part for RedCap WI.

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

**R4-2201436 UE demodulation and CSI reporting requirements for RedCap**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides our view on RedCap UE demodulation requirements.

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

**R4-2201605 Discussion on scope of UE demodulation and CSI requirements for reduced capability NR devices**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

**R4-2201720 Introduction of RedCap Demodulation Requirements**

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

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

## 7 Rel-17 Study Items for NR

### 7.1 Study on enhanced test methods for FR2 in NR

#### 7.1.1 Maintenance on objectives 1~6

**R4-2200452 TP to TR 38.884 on release independence applicability of test method enhancements**

*Type: pCR For: Approval  
 38.884 v1.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Apple*

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

#### 7.1.2 OTA test methods for UE RF, RRM and demodulation for 52.6~71GHz

##### 7.1.2.1 General

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**Email discussion for [101-bis-e][327] FR2\_enhTestMethods, AI 7.1— Aida Vera Lopez**

**R4-2202978 Email discussion summary for [101-bis-e][327] FR2\_enhTestMethods**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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| **Tdoc number** | **Title** | **Source** | **Comments** |
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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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###### 7.1.2.1.1 Test system assumption

###### 7.1.2.1.2 UE types

**R4-2201921 On Vehicular UEs**

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

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

###### 7.1.2.1.3 MU assessment

###### 7.1.2.1.4 Others

**R4-2201873 TP to TR 38.884 on extension of NR test methods to FR2-2**

*Type: pCR For: Approval  
 38.884 v1.2.0 CR- rev Cat: (Rel-17)  
  
 Source: Intel Corporation*

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

**R4-2201927 UE types and permitted methods for FR2-2**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

##### 7.1.2.2 Test methodology for UE RF

**R4-2201990 Issues with MIMO EVM Measurement Using the Pseudo-Inverse**

*Type: discussion For: Approval  
 Source: Lenovo, Motorola Mobility*

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

##### 7.1.2.3 Test methodology for RRM

**R4-2201874 NR FR2-2 OTA test methods for RRM**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

##### 7.1.2.4 Test methodology for UE demodulation and CSI

**R4-2200907 On permitted test methods for demodulation in FR2-2**

*Type: discussion For: Discussion  
 Source: Apple*

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

**R4-2201875 NR FR2-2 OTA test methods for UE demodulation**

*Type: discussion For: Discussion  
 Source: Intel Corporation*

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

## 8 Rel-17 Work Items for LTE

### 8.9 Additional enhancements for NB-IoT and LTE-MTC

#### 8.9.6 Demodulation requirements

##### 8.9.6.1 General

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**Email discussion for [101-bis-e][323] NB-IOT\_MTC\_Demod\_NWM, AI 8.9.6— Tricia Li**

**R4-2202979 Email discussion summary for [101-bis-e][323] NB-IOT\_MTC\_Demod\_NWM**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**

**Conclusion after 1st round**

**New t-docs**

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| **Tdoc number** | **Title** | **Source** | **Comments** |
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**Existing t-docs**

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| **Tdoc number** | **Title** | **Source** | **Decision** | **Comments** |
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**Conclusion after 2nd round**

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##### 8.9.6.2 Demodulation requirements for NB-IoT

###### 8.9.6.2.1 UE demodulation requirements

**R4-2200763 On UE demodulation requirements for 16-QAM NB-IoT**

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

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

**R4-2200995 Discussion on UE demodulation requirements for additional enhancements of NB-IoT**

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

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

**R4-2201432 View on Rel-17 NB-IoT UE demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides our view on Rel-17 NB-IoT UE demodulation requirements.

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

###### 8.9.6.2.2 BS demodulation requirements

**R4-2200751 View on demodulation requirement for Rel-17 NB-IoT**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2200996 Discussion on BS demodulation requirements for additional enhancements of NB-IoT**

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

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

**R4-2201433 View on Rel-17 NB-IoT BS demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides our view on Rel-17 NB-IoT BS demodulation requirements.

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

**R4-2201984 Discussion on BS demodulation requirements for Additional enhancements for NB-IoT**

*Type: discussion For: Discussion  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Discussion on BS demodulation requirements for NB-IoT 16QAM

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

##### 8.9.6.3 Demodulation requirements for MTC

**R4-2200750 View on demodulation requirement for Rel-17 eMTC**

*Type: discussion For: Discussion  
 Source: Samsung*

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

**R4-2200997 Discussion on UE demodulation requirements for additional enhancements of LTE-MTC**

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

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

**R4-2201434 View on Rel-17 LTE-MTC demodulation requirements**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

This contribution provides our view on Rel-17 eMTC UE/BS demodulation requirements.

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

## 9 Liaison and output to other groups

## 10 Any other business

## BACKUP

**R4-22AAAAA Email discussion summary for**

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

**Abstract:**

**Discussion:**

**Decision: Return to.**