3GPP TSG-RAN WG2 Meeting #131 R2-250xxxx

Bangalore, India Aug 25th – 29th , 2025

Source: RAN2 Chair (InterDigital)

Title: Agenda

# 1 Opening of the meeting

## 1.1 Call for IPR

|  |
| --- |
| The attention of the delegates of this Working Group is drawn to the fact that **3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners **to inform their respective Organizational Partners of Essential IPRs** they become aware of.  The delegates were asked to take note that they were hereby invited:   * to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP. * to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms (https://www.etsi.org/images/files/IPR/etsi-ipr-form.doc) |

NOTE: IPRs may be declared to the Director-General or Chairman of the SDO, but not to the RAN WG2 Chairman.

## 1.2 Network usage conditions

1/ To avoid email system overload, please don’t attach files and documents to emails e.g. for offline email discussions, but instead use files placed on the meeting server instead. Inbox/Drafts folder is used for meeting offline discussions.

## 1.3 Other

|  |
| --- |
| In accordance with the Working Procedures it is reaffirmed that:  (i) compliance with all applicable antitrust and competition laws is required;  (ii) timely submissions of work items in advance of TSG or WG meetings are important to allow for full and fair consideration of such matters; and  (iii) the chair will conduct the meeting with strict impartiality and in the interests of 3GPP |

Note on (i): In case of question please contact your legal counsel.

Note on (ii): WIDs don’t need to be submitted to the RAN2 meeting and will typically not be discussed here either.

# 2 General

## 2.1 Approval of the agenda

## 2.2 Approval of the report of the previous meeting

## 2.3 Reporting from other meetings

## 2.4 Instructions

CRs

* Use latest CR template version 12.3 for all CRs submitted to RAN2 meeting

Rel-18 and earlier maintenance CRs

* Only essential/critical corrections are expected
* Editorial and clarification corrections should be sent to be reviewed and approved by spec rapporteurs prior to submission.
* Editorials corrections should be collected and submitted by spec rapporteurs.
* NOTE: the tdoc limit applies to all CRs (i.e. WI spec rapporteurs are NO longer expected to submit individual contributions). They can submit a company CR where they also include miscellaneous corrections that have been sent to them.

Rel-18 UE capabilities

- EUTRA UE capabilities corrections are covered by separate CRs

- RAN1/RAN4 NR UE capabilities (new) and corrections are covered in Rel-18 common MegaCRs (38306 and 38331) covering all rel-18 WIs (end outcome).

- UE capabilities in LPP 37355 and SLPP 38355 are covered in the main CRs for the Positioning WI.

Tdoc limitations

Tdoc limitations doesn’t apply to Rapporteur Input, i.e.

- Assigned summary rapporteur input of the summary.

- Email / offline discussions outcomes by discussion rapporteur,

- Limit of 1 WI/SI rapporteurs input for WI planning. The work plan is not expected to be updated/submitted every meeting, unless needed. It can include progress of other WG groups in the same Tdoc (i.e. separate Tdocs on other WG agreements are not required).

- TS rapporteur input for TS maintenance.

- Contact Company of a LSin that triggers RAN2 action may submit one tdoc to facilitate the LS reply. This only applies to one of the contact companies in case there are several (default the first).

Tdoc limitations doesn’t apply to Input created at the meeting, revisions, assigned documents etc.

Tdoc limitations doesn’t apply to shadow / mirror CRs (Cat A), or In-Principle Agreed CRs.

Tdoc limitations applies to all other submitted tdocs (e.g. discussion tdoc and CR tdoc are counted as two).

Postponed CRs still count towards tdoc limit unless 3 or more companies are co-sourcing it.

For each R19 feature, 1 additional tdoc on top of the limit is allowed for a primary co-sourcing company for co-sourced contribution with 4 or more companies.

**Open issues**

* CR Rapporteurs (as indicated in email discussion scope) are expected to provide open issue list
* Please refer to RAN2 chair guidance document in [POST129bis][001][Organizational] Open issue list.
* CR rapporteurs are expected to ask for inputs, provide proposals on how to resolve the issues or provide limited options to resolve the issue for further discussion online.
* For each issue (before the email discussion deadline), rapporteurs are requested to explicitly indicate whether further contribution input on the open issue is needed. Input should be requested only for difficult to resolve issues and/or new open issues for which there wasn’t sufficient discussion time to resolve it.
* Companies should follow rapporteurs guidance (i.e. only address open issues for which the rapporteur indicates further input is needed).
* Companies should clearly indicate the open issue number they are addressing in their section and proposal, e.g. Proposal x: (RRC-1) Agree to bla bla
* Companies can discuss UE capabilities in their topic-specific Tdocs

**Rel-19 CRs**

* CR already agreed in principle but not yet officially agreed must be submitted to RAN2#131 for formal approval under in-principle agreed CRs AIs

Rel-19 UE capabilities

- EUTRA UE capabilities are covered by separate CRs

- All NR UE capabilities will be included common Mega CRs (38306 and 38331) covering all Rel-19 WIs (end outcome).

During the work on NR UE caps:

- In a Common Rel-19 Agenda Item (AI): RAN1 and RAN4 feature corrections are handled jointly under a common AI, with some explicit exceptions. UE capabilities will be included in UE cap MegaCR directly from UE capability rapporteur

- In WI-specific Rel-19 Agenda Items: RAN2 specific UE capabilities are handled per WI and endorsed as individual CRs. Final endorsed CRs will be merged into mega CR post meeting.

Tdoc request/submission for RAN2#131 deadlines:

* Tdoc Submission deadline: August 15th, 1000 UTC

## 2.5 Others

# 3 Incoming liaisons

Note: LSs are moved to the respective agenda items if any.

# 4 EUTRA Rel-17 and earlier

Only essential corrections. No documents should be submitted to 4. Please submit to 4.x

## 4.1 EUTRA corrections Rel-17 and earlier

(NB\_IOTenh4\_LTE\_eMTC6-Core; leading WG: RAN1; REL-17; WID: [RP-211340](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211340.zip))

(UPIP\_EN-DC\_UE; leading WG: RAN3; REL-17; WID: [RP‑213669](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_94e/Docs/RP-213669.zip))

(LTE TEI17)

Essential corrections to LTE Rel-17 topics not covered by other agenda items.

(NB\_IOTenh3-Core; leading WG: RAN1; REL-16; started: Jun 18; Completed: June 20; WID: [RP-200293](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200293.zip)); REL-15 and Earlier NB-IoT WIs are in scope but not listed explicitly (long list).

(LTE\_eMTC5-Core; LTE\_eMTC5-Core; leading WG: RAN1; REL-16; started: Jun 18; Completed: June 20; WID: [RP-192875](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_86/Docs/RP-192875.zip);), REL-15 and Earlier eMTC WIs are in scope but not listed explicitly (long list).

(LTE\_feMob-Core; leading WG: RAN2; REL-16; started: Jun 18; Completed: June 20; WID: [RP-190921](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_84/Docs/RP-190921.zip));

(LTE\_terr\_bcast-Core, LTE\_DL\_MIMO\_EE-Core, LTE\_high\_speed\_enh2-Core; LTE TEI16 Non-positioning);

(LTE\_NBIOT\_eMTC\_NTN; leading WG: RAN1; REL-17; WID: [RP-211601](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211601.zip))

REL-16 and Earlier EUTRA WIs are in scope but not listed explicitly (long list), Except Positioning WI, which is addressed by AIs below.

NOTE that LTE corrections related to NR WIs or Joint NR LTE WIs should be submitted to NR AIs below.

NOTE that LTE corrections which are the same as an NR correction should be submitted to the respective NR AI (so the NR CR and LTE CR can be treated together).

This Agenda Item is treated in the Maintenance Breakout session (Corrections for LTE\_NBIOT\_eMTC\_NTN might be treated in the NTN breakout session)

## 4.3 Positioning corrections Rel-16 and earlier

(LTE\_NavIC-Core, LTE TEI16 Positioning), REL-15 and Earlier WIs related to positioning are in scope but not listed explicitly (long list).

Tdoc Limitation: 1 tdoc

# 5 NR Rel-15 and Rel-16

Essential corrections only.

Tdoc Limitation: 4 Tdocs in total for agenda item 5 (incl. its sub agenda items) and agenda item 6 (incl. its sub agenda items)

In case a correction need to be reflected in both NR TS and LTE TS, the corrections should be submitted under one single AI (so the NR and LTE correction can be treated together), the sub-Ais below this

## 5.1 Common

Includes the following WIs and input that doesn’t fit elsewhere.

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: [RP-191971](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_85/Docs/RP-191971.zip))

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target Aug 20; WID: [RP-200840](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_88e/Docs/RP-200840.zip))

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; Closed June 20; WID: [RP-192926](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_86/Docs/RP-192926.zip)).

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; Completed: Jun 20; WID: [RP-200797](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_88e/Docs/RP-200797.zip))

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; Completed Jun 20; WID: [RP-200494](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200494.zip)).

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; Completed: June 20; WID: [RP-200085](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200085.zip)).

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; Completed; Mar 20; WID: [RP-190713](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_83/Docs/RP-190713.zip))

(RACS-RAN-Core, leading WG: RAN2; REL-16; started: Mar 19; completed: Jun 20; WID: [RP-191088](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_84/Docs/RP-191088.zip))

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; completed: June 20; WID: [RP-200122](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200122.zip))

(NR\_eMIMO-Core, leading WG: RAN1; REL-16; started: Jun 18; target; Aug 20; WID: [RP-200474)](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200474.zip)

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; Completed: Jun 20; WID: [RP-191997](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_85/Docs/RP-191997.zip))

(NR\_L1enh\_URLLC-Core, leading WG: RAN1; REL-16; Completed: June 20; WID: [RP-191584](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_84/Docs/RP-191584.zip))

(LTE\_NR\_DC\_CA\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; Target Aug 20; WI [RP-200791](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_88e/Docs/RP-200791.zip))

(NR\_Mob\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; Completed June 20; WID: [RP-192277](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_85/Docs/RP-192277.zip)).

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; Completed June 20; WID: [RP-191776](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_85/Docs/RP-191776.zip))

(5G\_V2X\_NRSL-Core; leading WG: RAN1; REL-16; started: Mar 19; completed; Aug 20; WID: [RP-200129](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200129.zip))

(NR\_HST, NR\_RRM\_enh-Core, NR\_RF\_FR1, NR\_RF\_FR2\_req\_enh, NR\_n66\_BW, LTE\_NR\_B41\_Bn41\_PC29dBm-Core, NR\_CSIRS\_L3meas,)

(NR TEI16)

LTE mob enh corrections that are common with NR mobility enhancements should be submitted to this AI.

### 5.1.1 Stage 2 and Organisational

Incoming LSs, etc. You should discuss your stage 2 CRs with the specification rapporteurs before submission. Includes impact to 38.300, 36.300, 37.340

### 5.1.2 User Plane corrections

User Plane corrections will be handled in the User Plane break out session

#### 5.1.2.1 MAC

#### 5.1.2.2 RLC PDCP SDAP BAP

### 5.1.3 Control Plane corrections

#### 5.1.3.1 NR RRC

Corrections to 38331, and related change to other TS if applicable, e.g. 36331, Stage-2 etc.

#### 5.1.3.2 UE capabilities

UE cap corrections 38306, 38331

#### 5.1.3.3 Other

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304, LTE-specific changes for the applicable WIs, Other parts not covered elsewhere.

## 5.3 NR Positioning Support

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: [RP-191971](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_85/Docs/RP-191971.zip))

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: [RP-200218](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_87e/Docs/RP-200218.zip)).

(NR TEI16 Positioning)

Stage 2 corrections shall be discussed with the specification rapporteur (Sven Fischer sfischer@qti.qualcomm.com) before submission. Stage 2 CRs not discussed with the specification rapporteur will not be treated.

# 6 NR Rel-17

Essential corrections only. Editorial/clarifications should be sent to be reviewed and approved by spec rapporteurs prior to submission. Editorials should only be submitted by spec rapporteurs.

Tdoc Limitation: 4 Tdocs in total for agenda item 5 (incl. its sub agenda items) and agenda item 6 (incl. its sub agenda items)

## 6.1 Common

(NR\_MG\_enh-Core; leading WG: RAN4; REL-17; WID: [RP-211591](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211591.zip))

(NR\_UDC\_enh-Core; leading WG: RAN2; REL-17; WID: [RP-211203](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211203.zip))

(NG\_RAN\_PRN\_enh-Core; leading WG: RAN3; REL-17; WID: [RP-202363](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_90e/Docs/RP-202363.zip))

(NR\_IAB\_enh-Core; leading WG: RAN2; REL-17; WID: [RP-211548](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211548.zip))

(NR\_UE\_pow\_sav\_enh-Core; leading WG: RAN2; REL-17; WID: [RP-212630](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212630.zip))

(LTE\_NR\_DC\_enh2-Core; leading WG: RAN2; REL-17; WID: [RP-201040](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_88e/Docs/RP-201040.zip))

(LTE\_NR\_MUSIM-Core; leading WG: RAN2; REL-17; WID: [RP-212610](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212610.zip))

(NR\_Slice-Core; leading WG: RAN2; REL-17; WID: [RP-212534](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212534.zip))

(NR\_QoE-Core; leading WG: RAN3; REL-17; WID: [RP-211406](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211406.zip))

(NR\_ext\_to\_71GHz-Core; leading WG: RAN1; REL-17; WID: [RP-212637](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212637.zip))

(NR\_cov\_enh-Core; leading WG: RAN1; REL-17; WID: [RP-211566](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211566.zip)): non-RACH-indication parts

(NR\_redcap-Core; leading WG: RAN1; REL-17; WID: [RP-211574](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211574.zip))

(NR\_feMIMO-Core; leading WG: RAN1; REL-17; WID: [RP-212535](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212535.zip))

(NR\_SmallData\_INACTIVE-Core, leading WG: RAN2; REL-17; WID: [RP-212594](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212594.zip))

(NR\_IIOT\_URLLC\_enh-Core; leading WG: RAN2; REL-17; WID: [RP-210854](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_91e/Docs/RP-210854.zip))

(NR\_MBS-Core; leading WG: RAN2; REL-17; WID: [RP-201038](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_88e/Docs/RP-201038.zip))

(NR\_ENDC\_SON\_MDT\_enh-Core; leading WG: RAN3; REL-17; WID: [RP-201281](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_88e/Docs/RP-201281.zip))

(NR\_NTN\_solutions-Core; leading WG: RAN2; REL-17; WID: [RP-211557](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_92e/Docs/RP-211557.zip))

(NR\_SL\_enh-Core; leading WG: RAN1; REL-17; WID: [RP-202846](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_90e/Docs/RP-202846.zip))

(NR\_SL\_Relay-Core; leading WG: RAN2; REL-17; WID: [RP-212601](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_93e/Docs/RP-212601.zip))

PRACH partitioning items

(NR TEI17)

Includes Rel-17 Work Items without specific R2 Agenda Item, e.g. RAN1 and RAN4 led items, SA2 and CT1 led items (was previously “Rel-17 Other”)

Includes aspects that does not fit under the more specific AIs, e.g. multi-WI aspects.

Corrections for NR\_NTN\_solutions-Core might be treated in the NTN breakout session.

### 6.1.1 Stage 2 and Organisational

Incoming LSs, etc. You should discuss your stage 2 CRs with the specification rapporteurs before submission. Includes impact to 38.300, 37.340, (36.300 if applicable)

### 6.1.2 User Plane corrections

User Plane Related aspects will be handled in the User Plane break out session. (exception: TEI new proposals if any).

### 6.1.3 Control Plane corrections

#### 6.1.3.1 NR RRC

Corrections to 38331, and related change to other TS if applicable, except UE caps.

#### 6.1.3.2 UE capabilities

UE cap corrections 38306, 38331.

#### 6.1.3.3 Other

Including idle and inactive behaviour specified in 38.304 or 36.304.

## 6.3 NR positioning enhancements

(NR\_pos\_enh-Core; leading WG: RAN1; REL-17; WID: [RP-210903](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_91e/Docs/RP-210903.zip))

# 7 Rel-18

## 7.0 Common

Rel-18 WIs not covered under an explicit AI in 7.x. Multi-WI Rel-18 items, e.g. cross-WI-issues not handled under another WI. UE capabilities.

### 7.0.1 UE Capabilities

Multi-WI handling of Rel-18 feature lists and UE capability Mega CRs.

### 7.0.2 Rel-18 corrections

*Essential corrections only. For smaller corrections please contact CR editor / Rapporteur directly. Coordinate with rapporteurs and chair if input above limit is required*

*Tdoc limitation: 5*

#### 7.0.2.1 RACH-less HO

*Corrections to generalized RACH-less HO procedure, including NTN, mIAB, and overlapping sections of the LTM cell switch procedure*

#### 7.0.2.2 NR network-controlled repeaters

(NR\_NetConRepeater; leading WG: RAN1; REL-18; WID: [RP-230175](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_99/Docs/RP-230175.zip))

#### 7.0.2.3 NR support for UAV

(NR\_UAV-Core; leading WG: RAN2; REL-18; WID: [RP-230782](https://www.3gpp.org/ftp/TSG_RAN/TSG_RAN/TSGR_99/Docs/RP-230782.zip) and LTE WID: [RP-230783](https://www.3gpp.org/ftp/TSG_RAN/TSG_RAN/TSGR_99/Docs/RP-230783.zip) )

#### 7.0.2.4 Mobile Terminated Small Data Transmission

(NR\_MT\_SDT-Core; leading WG: RAN2; REL-18; WID: [RP-222993](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-222993.zip))

#### 7.0.2.5 IDC enhancements for NR and MR-DC

(NR\_IDC\_enh-Core; leading WG: RAN2; REL-18; WID: [RP-221281](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_96/Docs/RP-221281.zip))

#### 7.0.2.6 Mobile IAB (Integrated Access and Backhaul) for NR

( NR\_mobile\_IAB -Core; leading WG: RAN3; REL-18; WID: [RP-232669](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_101/Docs/RP-232669.zip))

#### 7.0.2.7 Timing Resiliency and URLLC Enh

(NR\_TRS\_URLLC; leading WG: RAN3; REL-18; WID: [RP-230754](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_99/Docs/RP-230754.zip))

#### 7.0.2.8 Enhanced support of reduced capability NR devices

(NR\_redcap\_enh-Core; leading WG: RAN1; REL-18; WID: [RP-232671](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_101/Docs/RP-232671.zip))

#### 7.0.2.9 Further NR coverage enhancements

(NR\_cov\_enh2-Core; leading WG: RAN1; REL-18; WID: [RP-221858](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_96/Docs/RP-221858.zip))

#### 7.0.2.10 Network energy savings for NR

(Netw\_Energy\_NR-Core; leading WG: RAN1; REL-18; WID: [RP-223540](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-223540.zip))

#### 7.0.2.11 Further enhancement of data collection for SON MDT in NR and EN-DC

(NR\_ENDC\_SON\_MDT\_enh2-Core; leading WG: RAN3; REL-18; WID: [RP-221825](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_96/Docs/RP-221825.zip))

#### 7.0.2.12 Dual Transmission/Reception (Tx/Rx) Multi-SIM for NR

(NR\_DualTxRx\_MUSIM-Core; leading WG: RAN2; REL-18; WID: [RP-233071](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_100/Docs/RP-231461.zip))

#### 7.0.2.13 NR MIMO evolution

(NR\_MIMO\_evo\_DL\_UL-Core; leading WG: RAN1; REL-18; WID: [RP-233028](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-223276.zip))

#### 7.0.2.14 Enhancements of NR Multicast and Broadcast Services

(NR\_MBS\_enh-Core; leading WG: RAN2; REL-18; WID: [RP-231829](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_101/Docs/RP-231829.zip))

#### 7.0.2.15 Enhancement on NR QoE management and optimizations for diverse services

(NR\_QoE\_enh-Core; leading WG: RAN3; REL-18; WID: [RP-223488](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-223488.zip))

#### 7.0.2.16 XR Enhancements for NR

(NR\_XR\_enh-Core; leading WG: RAN2; REL-18; WID: [RP-230786](https://www.3gpp.org/ftp/TSG_RAN/TSG_RAN/TSGR_99/Docs/RP-230786.zip))

#### 7.0.2.17 NR NTN enhancements

(NR\_NTN\_enh-Core; leading WG: RAN1; REL-18; WID: [RP-232669](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_101/Docs/RP-232669.zip))

#### 7.0.2.18 IoT NTN enhancements

(IoT\_NTN\_enh-Core; leading WG: RAN2; REL-18; WID: [RP-223519](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-223519.zip))

#### 7.0.2.19 Enhanced NR Sidelink Relay

(NR\_SL\_relay\_enh-Core; leading WG: RAN2; REL-18; WID: [RP-223501](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_98e/Docs/RP-223501.zip))

#### 7.0.2.20 NR Sidelink evolution

(NR\_SL\_enh2-Core; leading WG: RAN1; REL-18; WID: [RP-230077](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_99/Docs/RP-230077.zip))

#### 7.0.2.21 Expanded and improved NR positioning

(NR\_pos\_enh2-Core; leading WG: RAN1; REL-18; WID: [RP-232670](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_101/Docs/RP-232670.zip))

#### 7.0.2.22 Further NR mobility enhancements

(NR\_Mob\_enh2-Core; leading WG: RAN2; REL-18; WID:RP-233970)

#### 7.0.2.23 TEI18

#### 7.0.2.24 Others

Including NR Others, Multi-WI Rel-18 items, e.g. cross-WI-issues not handled under another WI

# 8 Rel-19

## 8.0 General

This AI is reserved for Rel-19 LSs from other WGs. No contributions are expected on these LSs for this meeting

Reserved for UE capability rapporteur input and Rel-19 ASN.1 review including output of [POST129bis][002][ASN.1 review] Process improvements (Nokia)

*Including Reply LS from CT1 C1-252546 (R2-2503304). Apple is expected to provide draft CRs.*

## 8.1 AI/ML for NR air interface

(NR\_AIML\_air-Core; leading WG: RAN1; REL-19; WID: RP-250792 and SID: RP-243245)

Time budget: 2.5 TU

Tdoc Limitation: 3 tdocs

### 8.1.1 Organizational

LS, Rapporteur input, including workplan.

Including outcome of [POST130][022][AI PHY] 38.300 Running CR (Vivo), [POST130][023][AI PHY] 38.305 Running CR (CATT), [POST130][025][AI PHY] 37.355 Running CR (Qualcomm), [POST130][026][AI PHY] 38.331 Running CR (Ericsson), and [POST130][038][AI PHY] UE capabilities (Xiaomi)

### 8.1.2 Functionality based LCM

Contributions should focus on general understanding of LCM procedure (except for data collection transfer (i.e. study item part) and model transfer/delivery), what is required to enable the UE to perform different steps of the LCM procedure, what is the granularity of functionality, dependencies with RAN1 and what is needed from RAN1 to progress in RAN2

Contributions should be submitted in 8.1.2.x and aspects related to data collections should be submitted in data collection section

Two-sided model discussions are out of scope of this AI

#### 8.1.2.1 LCM for NW-sided model for Beam Management use case

LCM related to NW-sided model for beam management use case.

No contributions expected for this meeting.

#### 8.1.2.2 LCM for UE-sided model for Beam Management use case

Including functionality identification, additional conditions and further reporting of applicable functionalities, and any necessary signaling/protocol aspects including, optiona A and Option B (except RRC parameter details in OtherCongif). Contributions should to take into consideration the reply LS from RAN1 (R1-2410898) on BM applicable functionality reporting and other RAN1 agreements.

Contributions can discuss aspects of LCM that are significantly different from BM for CSI prediction use case.

Including outcome of [POST130][037][AI PHY] UE candidate data collection (Xiaomi\_Ericsson)

#### 8.1.2.3 LCM for Positioning use case

Contributions should focus on LCM for UE-sided model, but can discuss NW-sided model. Aspects related to data collection should be covered in 8.1.3

### 8.1.3 NW side data collection

Contributions should focus on the remaining aspects related to mechanisms and principles identified for data collection for network side model training. Including outcome of [POST130][031][AI PHY] NW side data collection (Ericsson and ZTE) and [POST130][034][AI PHY] LS to RAN3 (Nokia).

### 8.1.4 UE side data collection

*Configuration details for Rel-19 data collection for UE-sided model can be discussed in contributions in 8.1.2.2.*

*Discuss any of the aspects identified in RANP WF*

*o Study RAN aspects related to data transfer over UP*

*o Discuss level of NG-RAN involvement in the control and configuration of UE side data collection.*

*o Discuss NG-RAN involvement in the data transfer of UE side data collection (if any) (including visibility discussion).*

*o Discuss aspects/solutions from RAN perspective that enable the data transfer to CN domain or OAM domain.*

*o Discuss on the scalability aspects of CP*

Including the outcome of [POST130][033][AI PHY] UE Side data collection (Ericsson)

This AI is downprioritized as it will be in scope of Rel-20. If any contributionsa are submiited they should be focused on something critical needed to be included in the TR.

### 8.1.5 Model transfer/delivery

*Not treated in RAN2#131 (postponed for Rel-20 WID)*

## 8.2 Ambient IoT

(Ambient\_IoT\_solutions, leading WG: RAN1; REL-19; WID: RP-250796)

Time budget: 2.5 TU

Tdoc Limitation: 3 tdocs

### 8.2.1 Organizational

LS, Rapporteur input, including workplan, etc.

Including outcome of [POST130][027][AIoT] MAC Running CR (Huawei) and [POST130][028][AIoT] 38.300 Running CR (CMCC)

### 8.2.2 A-IoT Paging

Contributions should focus on paging message content and format, including paging identifier details, transaction ID details, resource information details , end-of procedure, etc.

### 8.2.3 A-IoT Random Access

*Contributions should focus on details of contention-based and contention-free access, including re-access for failure handling and MSG2 boundary, msg content/format, format (R2D trigger message, Msg1, Msg2, NACK based feedback for re-access, etc.)*

### 8.2.4 A-IoT Data Transmission and Other general aspects

*Contributions should focus on MAC PDU/signaling general format (the content of paging, Msg1, Msg2 etc. should be discussed in above specific agendas), TBS size and byte alignment (based on RAN1 discussion), message details for segmentation for D2R, data not available case (pending CT1 inputs), segmentation for D2R, AS ID\*

## 8.3 AI/ML for Mobility

(FS\_NR\_AIML\_Mob; leading WG: RAN2; REL-19; SID: [RP-242393](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_105/Docs/RP-242393.zip))

Time budget: 2 TUs

Tdoc Limitation: 4 tdocs

### 8.3.1 Organizational

LS, Rapporteur input, including workplan, etc.

Including outcome of [POST130][021][AI Mob] TR update (Oppo)

### 8.3.2 UE sided model

Contributions should be submitted in 8.3.2.x.

#### 8.3.2.1 Functionality management for RRM measurement prediction

*Including applicability procedure, inference configuration/reporting and performance monitoring for UE sided model for RRM measurement prediction*

#### 8.3.2.2 Functionality management for RRM measurement event prediction

*Including applicability procedure, inference configuration/reporting and performance monitoring for UE sided model for RRM measurement event predictions*

#### 8.3.2.3 Data collection

*Aspects related to data collection for UE sided model for RRM measurement prediction and RRM measurement event prediction (excluding those aspects that are under study in AI/ML PHY)*

### 8.3.3 Network sided model

*Including (sub)use cases to be supported, assistance information from the UE (e.g., measurements for inference or performance monitoring), and data collection.*

## 8.4 Low-power wake-up signal and receiver for NR (LP-WUS/WUR)

(NR\_LPWUS-Core; leading WG: RAN1; REL-19; WID [RP-241824](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_105/Docs/RP-241824.zip))

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 8.4.1 Organizational

LS, Rapporteur input, including workplan, Running CRs, email discussion summary, open issue list(s), etc.

### 8.4.2 Procedure and configuration of LP-WUS in RRC\_IDLE/INACTIVE

Procedure and configuration of LP-WUS indicating paging monitoring triggered by LP-WUS, including at least configuration, sub-grouping, and entry/exit condition for LP-WUS monitoring

### 8.4.3 RRM measurement relaxation and offloading in RRC\_IDLE/INACTIVE

RRM relaxation of UE MR for both serving and neighbor cell measurements, and UE serving cell RRM measurement offloaded from MR to LP-WUR, including the necessary conditions

### 8.4.4 Procedures for LP-WUS in RRC\_CONNECTED

Procedures to allow UE MR PDCCH monitoring triggered by LP-WUS including activation and deactivation procedure of LP-WUS monitoring.

## 8.5 Network Energy Saving Enh.

(Netw\_Energy\_NR\_enh-Core; leading WG: RAN1; REL-19; WID: [RP-242354](https://www.3gpp.org/ftp/meetings_3gpp_sync/ran/docs/RP-242354.zip))

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 8.5.1 Organizational

Incoming LS, WI rapporteur inputs, CR rapporteur inputs (including post email discussion [POST130][107], [108], [109], [119], summary of identified stage-3 open issues that need online discussion and rapporteur’s suggestions if needed, details of UE capability discussion if needed).

### 8.5.2 On-demand SSB SCell operation

Remaining essential open issues including stage-3 identified open issues if needed, etc.

### 8.5.3 On-demand SIB1

Remaining essential open issues including whether to support SUL in OD-SIB1 cell, stage-3 identified open issues if needed, etc.

### 8.5.4 Adaptation of common signal/channel transmissions

Remaining essential open issues including down-selection of solutions on how to disable RACH adaptation for MSG1 repetition, stage-3 identified open issues if needed, etc.

## 8.6 Mobility Enhancement Ph4

(NR\_Mob\_Ph4-Core; leading WG: RAN2; REL-19; WID: [RP-242356](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_105/Docs/RP-242356.zip))

Time budget: 2 TU

Tdoc Limitation: 3 tdocs

### 8.6.1 Organizational

Incoming LS, WI rapporteur inputs, CR rapporteur inputs (including post email discussion [POST130][110], [111], [120], summary of identified stage-3 open issues that need online discussion and rapporteur’s suggestions if needed).

### 8.6.2 Inter-CU LTM

Remaining essential open issues including handling of target cell’s SP CSI-RS resources after cell switch, stage-3 identified open issues if needed, etc.

### 8.6.3 L1 event triggered measurement reporting

Remaining essential open issues includingpost email discussion [POST130][117] and conclusion on the coexistence with mTRP, stage-3 identified open issues if needed, etc.

### 8.6.4 Conditional intra-CU LTM

Remaining essential open issues including stage-3 identified open issues if needed, etc.

## 8.7 XR Enhancements Ph3

(NR\_XR\_Ph3-Core; leading WG: RAN2; REL-19; WID: RP-250107)

Time budget: 2 TU

Tdoc Limitation: 3 tdocs

### 8.7.1 Organizational

LS, rapporteur input, workplan, running CRs, open issues lists etc.

### 8.7.2 Multi-modality support

**No contributions are expected for this AI**

### 8.7.3 RRM measurement gaps/restrictions related enhancements

Remaining issues for this AI are expected to be covered by [POST130][506][XR] RRC running CR (Huawei) and no contributions are expected.

### 8.7.4 Scheduling enhancements

Remaining open issues related to LCP and DSR enhancements.

### 8.7.5 RLC enhancements

Remaining open issues related to RLC enhancements.

### 8.7.6 XR rate control

Remaining open issues related to XR rate control.

## 8.8 NTN for NR Ph3

(NR\_NTN\_Ph3-Core; leading WG: RAN2; REL-19; WID: RP-243300)

LTE\_TN\_NR\_NTN\_mob, leading WG: RAN2, Rel-19 WID: [RP-240924](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_104/Docs/RP-240924.zip))

Time budget: 2 TU

Tdoc Limitation: 3 tdocs

### 8.8.1 Organizational

LS, Rapporteur input, including workplan, running CRs, open issues lists, etc.

Rapporteur inputs do not count towards the tdoc limitation.

Including the outcome of the following email discussion:

[Post130][301][R19 NR NTN] Stage2 CR (Thales)

[Post130][302][R19 NR NTN] RRC CR (Ericsson)

[Post130][303][R19 NR NTN] 38.304 CR (ZTE)

### [Post130][304][R19 NR NTN] capability CR (Apple)For the LTE\_TN\_NR\_NTN\_mob WI, including endorsed draft CRs from the WI spec rapporteurs.8.8.2 Downlink coverage enhancements

Contributions should focus on remaining open issues related to RAN2 aspects of DL coverage enhancements due to extended SIB periodicity (up to 160ms), e.g. possible SMTC impacts (while no contributions are expected on cell level / beam level DTX/DRX mechanism).

### 8.8.3 Uplink Capacity/Throughput Enhancement

Contributions can be submitted on the possible RAN2 aspects of the agreements reached in RAN1.

### 8.8.4 Support of Broadcast service

Contributions should address the remaining open issues related to the signaling of the intended service area of a broadcast service.

### 8.8.5 Support of regenerative payload

Contributions, if any, should focus on the needed updates for Stage 2 description and on whether any other existing essential features (not considered so far) would be affected - and potentially need any modifications - in a regenerative payload architecture.

### 8.8.6 LTE to NR NTN mobility

Contributions, if any, should focus on any possible missing aspects for the support of idle mode mobility between LTE and NR NTN.

## 8.9 IoT NTN Ph3

(IoT\_NTN\_Ph3-Core; leading WG: RAN2; REL-19; WID: RP-243278)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 8.9.1 Organizational

LS, Rapporteur input, including workplan, running CRs, open issues lists, etc.

Rapporteur inputs do not count towards the tdoc limitation.

Including the outcome of the following email discussion:

[Post130][305][R19 IoT NTN] Stage2 CR (Ericsson)

[Post130][306][R19 IoT NTN] RRC CR (Huawei)

[Post130][307][R19 IoT NTN] MAC CR (Mediatek)

[Post130][308][R19 IoT NTN] 36.304 CR (Nokia)

[Post130][309][R19 IoT NTN] capability CR (Qualcomm)

### 8.9.2 Support of Store & Forward

Contributions should focus on remaining open issues related to possible impacts to the radio interface.

### 8.9.3 Uplink Capacity Enhancement

Contributions should focus on remaining open issues related to the enhancements to reduce the necessary uplink and downlink signaling to complete an EDT transaction (Msg3 transmission without msg1/RAR; efficient delivery of msg4 / RRCEarlyDataComplete).

### 8.9.4 Support of PWS

Contributions should focus on remaining open issues related to the introduction of support for broadcast of PWS messages for NB-IoT, re-using the LTE mechanisms.

## 8.10 SON/MDT Ph4

(NR\_ENDC\_SON\_MDT\_Ph4-Core; leading WG: RAN3; REL-19; WID: [RP-234038](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_102/Docs/RP-234038.zip))

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

### 8.10.1 Organizational

LS, Rapporteur input, including workplan, etc.

### 8.10.2 MRO enhancements for Rel-18 mobility features

LTM has 1st priority. CHO with candidate SCGs has 2nd priority

Subsequent CPAC is paused until if/when we get a RAN3 LS on the subject

### 8.10.3 Other

RACH optimization for SDT focus on RSRP and data volume in SON reports, and existing failure causes.

MHI Enhancement for SCG Deactivation/Activation.

SON/MDT for Slicing

SON/MDT for NTN

## 8.11 Evolution of NR duplex operation: Sub-band full duplex (SBFD)

(NR\_duplex\_evo-Core; leading WG: RAN1; REL-19; WID: [RP‑241614](https://www.3gpp.org/ftp/meetings_3gpp_sync/ran/docs/RP-241614.zip))

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

### 8.11.1 Organizational

Incoming LS, Rapporteur input, including workplan, running CRs, email discussion summary, open issue list(s), etc..

### 8.11.2 Random access in SBFD

RAN2 impacts to support SBFD operation to support random access in SBFD symbols by UEs in RRC \_CONNECTED mode and RRC\_IDLE/INACTIVE mode.

### 8.11.3 Other aspects

Other RAN2 impacts with SBFD if not covered by the previous agenda items.

## 8.12 NR MIMO Phase 5

(NR\_MIMO\_Ph5-Core; leading WG: RAN1; REL-19; WID: [RP-242394](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_105/Docs/RP-242394.zip))

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

### 8.12.1 Organizational

LSs and rapporteur input, including workplan, running CRs, email discussion summary, open issue list(s), etc.

### 8.12.2 Asymmetric DL sTRP/UL mTRP

Remaining issues for asymmetric DL sTRP/UL mTRP

### 8.12.3Others

Remaining issues for UE-initiated reporting, and other issues if not covered by the previous agenda items.

## 8.13 NR sidelink multi-hop relay

(NR\_SL\_relay\_multihop; leading WG: RAN2; REL-19; WID: [RP-250188](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_107/Docs/RP-250188.zip))

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 8.13.1 Organizational

LSs and rapporteur input, including workplan, etc.

Including outcomes of email discussions on running CRs

### 8.13.2 Relay discovery and (re)selection

Enhancements to relay dscovery and (re)selection to support one additional hop relay (remote UE ⬄ first relay UE ⬄ last relay UE ⬄ gNB). Extensibility to a second additional hop in this WI is considered as a design criterion.

### 8.13.3 Control Plane Procedures and SRAP impact

Contributions should focus on control plane procedures and can include SRAP impact and QoS handling to support additional hops.

### 8.13.4 Service continuity

First priority scenarios: (A) intra-gNB multi-hop indirect to direct path switch, (B) intra-gNB multi-hpo indirect to single-hop indirect path switch. Second priority scenarios: (C) intra-gNB direct to multi-hop indirect path switch, (D) intra-gNB single-hop indirect to multi-hop indirect path switch.

## 8.14 Additional topological enhancements

(NR\_WAB\_5GFemto; leading WG: RAN3; REL-19; WID RP-243009)

Time budget: 0 TU

Tdoc Limitation: 0 tdocs

Work on this WI will only be triggered by LS from RAN3 so work on this WI is not expected to start RAN2#127bis or RAN2#128.

No contributions expected for this meeting

## 8.15 NavIC L1 SPS A-GNSS support

(LCS\_NAVIC\_L1\_SPS\_NR\_LTE-Core; leading WG: RAN2; REL-19; WID [RP-251552](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_108/Docs/RP-251552.zip)

Time budget: 0 TU

Tdoc Limitation: 1 tdoc

## 8.16 BDS B2b in A-GNSS

LCS\_BDS\_B2b\_LTE\_NR; leading WG: RAN2; REL-19; WID [RP-250767](http://ftp.3gpp.org/tsg_ran/TSG_RAN/TSGR_107/Docs/RP-250767.zip))

Time budget: 0 TU

Tdoc Limitation: 1 tdoc

## 8.17 IoT-NTN TDD mode

(IoT\_NTN\_TDD; leading WG: RAN1; REL-19; WID RP-243293)

Time budget: 0.5 TU

Tdoc Limitation: 1 tdoc

Including the outcome of the following email discussion:

[Post130][310][IoT NTN TDD] Stage2 CR (Iridium)

[Post130][311][IoT NTN TDD] RRC CR (Huawei)

[Post130][312][IoT NTN TDD] MAC CR (Toyota)

[Post130][313][IoT NTN TDD] 36.304 CR (Xiaomi)

## [Post130][314][IoT NTN TDD] capability CR (Samsung)8.18 LTE-based 5G Broadcast

(LTE\_terr\_bcast\_Ph2; leading WG: RAN1; REL-19; WID RP-250794)

Time budget: 0.25 TU

Tdoc Limitation: 1 tdoc

### 8.18.1 Organizational

Incoming LS, rapporteur input, running CRs, etc.

### 8.18.2 Other

RAN2 signalling impacts to support time-frequency interleavers.

## 8.19 TEI19

Time budget: 1 TU

Tdoc Limitation: 1 tdoc for new proposals and 1 tdoc for old proposals for RAN2-led.

1 additional tdoc for primary co-sourcing company on top of the limit is allowed for co-sourced contribution with 4 or more companies.

Companies are encouraged to submit co-sourced contributions, which will have priority for discussion in RAN2#130

### 8.19.1 RAN2-led

### 8.19.2 Other WG-led

## 8.20 NR Others

Tdoc limit: 2

Specific items may be allocated to a breakout session for treatment.

Impacts from Other RAN WGs and TSGs that has no separate TU budget in RAN2. LS ins for Rel-19 specific WIs/SIs that has no RAN WI.

Additional tdocs on top of limit can be allowed for co-sourced contribution with 3 or more companies

### 8.20.1 RAN4

### 8.20.2 Other WGs

# 9 Breakout session reports

No documents shall be submitted to this AI or its sub-AIs. It is only for at-meeting-generated contents.

## 9.1 Session on V2X/SL, R19 NES and MOB

## 9.2 Session on R18 MIMOevo, R18 MUSIM, and R19 LP-WUS

## 9.3 Session on NR NTN and IoT NTN

## 9.4 Session on positioning and sidelink relay

## 9.5 Session on R19 XR and LTE-based 5G Broadcast

## 9.6 Session on maintenance and SON/MDT