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

Prague, Czech Republic, Oct. 13th-17th

Source: RAN2 Chair (InterDigital)

Title: Agenda

# 1 Opening of the meeting

## 1.1 Call for IPR

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| 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

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| 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.

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| **Consensus principles reminder**  The attention of the delegates to the meeting is drawn to the fact that 3GPP endeavours to reach consensus on all decisions and therefore depends on a cooperative spirit of the Individual Members. In particular, Individual Members are encouraged to seek a consensus-based solution and only to sustain objections as a very last resort, and where absolutely necessary and well justified. The leadership will conduct the present meeting in a manner whereby informal methods of reaching consensus are encouraged, whilst ensuring that well justified concerns are taken into account |

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| **RAN endorsed working principle for 6G (RP-250766)**  3GPP to create lean and streamlined standards for 6G, e.g., by dimensioning an appropriate set of functionalities, minimizing the adoption of multiple options for the same functionality, avoiding excessive configurations, etc. Any exception to the above shall be well justified. |

# 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.

**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
* CR editors / Rapporteurs continue to support maintenance related to their respective CR / WI and are required to follow drafting rules
* **Single correction CR per spec** coordinated by CR editor/rapporteurs will be agreed per feature for RAN#132
* **Rapporteurs (except for RRC) should create open issue list for correction phase. See below.**
* CR editors / Rapporteurs should gather miscellaneous and non-controversial issues, if any, for their respective specification prior to submission deadline.  **Other companies are expected to give editorial inputs to the rapporteurs and not have contributions on such issues**.
* Emails to CR editors/rapporteurs should follow the following naming convention when sending emails to rapporteurs:

**[Pre\_RAN2#131bis][CR xx.yyy] Clarification CRs**

* The organizational AIs for each WIs are reserved for rapporteurs only.  CR rapporteurs are expected to submit only 1 CR per spec.
* Companies are expected to submit Tdocs with TP (not CRs).   More specifically, the Tdoc should contain description of open issues/proposal and the proposed corrections/TP in the contribution itself.   Small issues can be included in the tdoc with just short justification same level of detail as in cover sheet.
* RRC ASN.1 changes can be drafted in a NBC way until ASN.1 is frozen, to avoid unnecessary RRC overhead.   The focus should be on drafting the changes in the best possible way.
* Inter-op analysis on Rel-19 CR coverpages in NOT needed

**Open issues**

* A list of open issues for correction phase is expected to be created per CR per WI (except for RRC specification - issues will be maintained in RIL list) and shared as soon as possible.  **The list of CR open issues should be completed by Sept. 19th** from CR editors/rapporteurs.  Companies can contribute to the open issue list and input (if requested) possible resolution.
* Rapporteur and/or company identifying issue can provide proposal on how to resolve the issues
  + For each issue, 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.
  + Rapporteurs should critically consider the need for contribution on an issue.  If the issue can be resolved with a quick offline during the meeting, then the issue should be marked as to be resolved offline without contributions on that topic.
* Stage 2 corrections and UE capability corrections should be given to rapporteur directly over email discussion and no contributions are expected, unless really needed as specified by rapporteur.
* 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: (RIL-1, MAC-1, etc) Agree to bla bla

**ASN.1 and Handling of RILs**

* Please review Hakan's email instructions on ASN.1 review.  Instructions are found at:  [Directory Listing /ftp/Email\_Discussions/RAN2/[Misc]/ASN1 review/Rel-19 2025-09](https://www.3gpp.org/ftp/Email_Discussions/RAN2/%5BMisc%5D/ASN1%20review/Rel-19%202025-09)
* Companies are expected to provide their TPs/Comments in the RIL Comment file and not submit contributions.   WI CR and RRC spec Rapporteurs can identify the critical RILs that require further contribution inputs.
* Single Tdoc containing 1 or more RIL resolutions per WI is expected.    Companies are highly encouraged to work offline to resolve the issues.

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 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 (this also applies to RILs).

Tdoc request/submission for RAN2#131bis deadlines:

* Tdoc Submission deadline: Oct 3rd, 2025

## 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: 3 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 NR 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: 4*

#### 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))

Including outcome of email discussion [Post131][410][POS] Stage 2 descriptions for Rel-18 positioning (CATT)

#### 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 NR Rel-19

## 8.0 General

### 8.0.1 ASN.1 Review

Contributions on common ASN.1 identified issues and cross-WI identified issues. RILs specific to WI are expected to be discussed in corresponding WI.

*Rapporteur will create separate list that only include the RILs to be discussed in common session. One contribution covering the common session RILs is expected per company. Additional tdoc can be submitted for co-sourced contributions with 4 or more companies.*

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

## 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: 0 TU

Tdoc Limitation: 3 tdocs

### 8.1.1 Organizational

LS, Rapporteur input, including workplan.

### 8.1.2 Functionality based LCM

Corrections only. Companies should follow guidance from rapporteurs.

#### 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

Corrections only. Companies should follow guidance from rapporteurs.

#### 8.1.2.3 LCM for Positioning use case

Corrections only. Companies should follow guidance from rapporteurs.

### 8.1.3 NW side data collection

Corrections only. Companies should follow guidance from rapporteurs.

## 8.2 Ambient IoT

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

Time budget: 0 TU

Tdoc Limitation: 1 tdoc

### 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

Corrections only. Companies should follow guidance from rapporteurs.

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

(NR\_LPWUS-Core; leading WG: RAN1; REL-19; WID RP-251200)

Time budget: 0 TU

Tdoc Limitation: 3 tdocs

### 8.4.1 Organizational

LS, Rapporteur input, etc.

### 8.4.2 RRC issues

Issues related to RILs, other remaining RRC issues

### 8.4.3 MAC issues

Remaining MAC issues

### 8.4.4 Other issues

Issues related to IDLE/INACTIVE, Changes to Stage 2, UE capabilities, and other remaining issues if not covered by the previous agenda items

## 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: 0 TU

Tdoc Limitation: 2 tdocs

### 8.5.1 Organizational

Incoming LS, CR rapporteurs’ inputs, etc.

### 8.5.2 Control plane

Essential RRC corrections (including the issues related to RILs), 38.304, stage-2, and UE capability corrections. Note stage-2 corrections may be handled with lower priority.

### 8.5.3 User plane

Essential MAC corrections.

## 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: 0 TU

Tdoc Limitation: 2 tdocs

### 8.6.1 Organizational

Incoming LS, CR rapporteurs’ inputs, etc.

### 8.6.2 Control plane

Essential RRC corrections (including the issues related to RILs), stage-2, and UE capability corrections. Note stage-2 corrections may be handled with lower priority.

### 8.6.3 User plane

Essential MAC corrections.

## 8.7 XR Enhancements Ph3

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

Time budget: 0 TU

Tdoc Limitation: 4 tdocs

### 8.7.1 Organizational

LS, rapporteur input, open issues lists etc.

### 8.7.2 RRC corrections

Corrections to TS 38.331 which require Tdoc submission as per RIL list.

### 8.7.3 User plane corrections

Corrections to 38.321, 38.322 and 38.323. No contributions should be submitted to 8.7.3, please use 8.7.3.x.

#### 8.7.3.1 Scheduling enhancements

Corrections related to LCP/DSR enhancements and measurement gap skipping.

#### 8.7.3.2 RLC enhancements

Corrections related to RLC enhancements.

#### 8.7.3.3 XR rate control

Corrections related to XR rate control.

### 8.7.4 Other corrections

Including corrections to stage-2, UE capabilities etc.

## 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: 0 TU

Tdoc Limitation: 3 tdocs

### 8.8.1 Organizational

LS, Rapporteur input, including open issues lists, etc.

Rapporteur inputs do not count towards the tdoc limitation.

Including the lists of open issues, if any, raised in the following email discussions:

[Post131][301][R19 NR NTN] Stage2 CR (Thales)

[Post131][302][R19 NR NTN] RRC CR (Ericsson)

[Post131][303][R19 NR NTN] 38.304 CR (ZTE)

[Post131][304][R19 NR NTN] capability CR (Apple)

[Post131][315][R19 NR NTN] MAC CR (Interdigital)

[Post131][316][LTE NR NTN mob] Stage2 CR (Samsung)

[Post131][317][LTE NR NTN mob] RRC CR (CATT)

[Post131][318][LTE NR NTN mob] capability CR (vivo)

### 8.8.2 RRC corrections

Corrections to TS 38.331.

### 8.8.3 Idle mode corrections

Corrections to TS 38.304.

### 8.8.4 Other corrections

Corrections to TS 38.300, TS 38.306 and TS 38.321.

### 8.8.5 LTE to NR NTN mobility corrections

Corrections to all specs for LTE\_TN\_NR\_NTN\_mob.

## 8.9 IoT NTN Ph3

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

Time budget: 0 TU

Tdoc Limitation: 3 tdocs

### 8.9.1 Organizational

LS, Rapporteur input, including open issues lists, etc.

Rapporteur inputs do not count towards the tdoc limitation.

Including the lists of open issues, if any, raised in the following email discussions:

[Post131][305][R19 IoT NTN] Stage2 CR (Ericsson)

[Post131][306][R19 IoT NTN] RRC CR (Huawei)

[Post131][307][R19 IoT NTN] MAC CR (Mediatek)

[Post131][308][R19 IoT NTN] 36.304 CR (Nokia)

[Post131][309][R19 IoT NTN] capability CR (Qualcomm)

### 8.9.2 RRC corrections

Corrections to TS 36.331.

### 8.9.3 MAC corrections

Corrections to TS 36.321.

### 8.9.4 Other corrections

Corrections to TS 36.300, TS 36.304 and TS 36.306.

## 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 TU

Tdoc Limitation: 2 tdocs

### 8.10.1 Organizational

LS, CR rapporteur’s miscellaneous non-controversial corrections, etc.

### 8.10.2 Papers related to RILs

Papers related to identified RILs

### 8.10.3 Other

Critical corrections, if any.

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

(NR\_duplex\_evo-Core; leading WG: RAN1; REL-19; WID: RP-251874)

Time budget: 0 TU

Tdoc Limitation: 2 tdocs

### 8.11.1 Organizational

Incoming LS, Rapporteur input, etc..

### 8.11.2 MAC issues

Remaing MAC issues

### 8.11.3 Other aspects

Issues related to RILs, other remaing RRC issues, Changes to Stage 2, UE capabilities, and other remaining issues if not covered by the previous agedam 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 TU

Tdoc Limitation: 2 tdocs

### 8.12.1 Organizational

LSs and rapporteur input, etc.

### 8.12.2 MAC issues

Remaining MAC issues

### 8.12.3Others

Issues related to RILs, other remaining RRC issues, Changes to Stage 2, 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: 0 TU

Tdoc Limitation: 2 tdocs

### 8.13.1 Organizational

LSs and rapporteur input

### 8.13.2 Control plane

Impact to 38.331 (except for capability issues), 38.304

### 8.13.3 User plane corrections

Impact to 38.351, 38.321, and 38.323.

### 8.13.4 Others

Impact to specs not listed above, including capability aspects of 38.331.

## 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: 0TU

Tdoc Limitation: 1 tdoc

Corrections to all specs.

Including the lists of open issues, if any, raised in the following email discussions:

[Post131][310][IoT NTN TDD] Stage2 CR (Iridium)

[Post131][311][IoT NTN TDD] RRC CR (Huawei)

[Post131][312][IoT NTN TDD] MAC CR (Toyota)

[Post131][313][IoT NTN TDD] 36.304 CR (Xiaomi)

[Post131][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 TU

Tdoc Limitation: 2 tdoc

### 8.18.1 Organizational

Incoming LS, rapporteur input etc.

### 8.18.2 RRC corrections

Corrections to TS 36.331 which require Tdoc submission as per RIL list..

### 8.18.3 Other corrections

Corrections to other specifications including 36.321 and UE capabilities

## 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 NR Rel-20

## 9.1 AI/ML for PHY Ph2

(NR\_AIML\_air\_Ph2, leading WG: RAN1; REL-20; WID: RP-251860)

Time budget: 0 TU

Tdoc Limitation: 0 tdoc

## 9.2 Ambient IoT Ph2

(Ambient\_IoT\_Solutions\_Ph2, leading WG: RAN1; REL-20; WID: RP-251885)

Time budget: 0.5 TU

Tdoc Limitation: 1 tdoc

### 8.1.1 Organizational

### 8.1.2 Topology 2

*Contributions on support for Deployment Scenario 2 with Topology 2 with intermediate UE as Reader under the following conditions. Only for traffic types DO-DTT and DT.*

## 9.3 AI/ML for mobility

(NR\_AIML\_Mob, leading WG: RAN2; REL-20; WID: RP-251864)

Time budget: 0 TU

Tdoc Limitation: 0 tdoc

## 9.4 Mobility Enh Ph5

(NR\_Mob\_Ph5; leading WG: RAN2; REL-20; WID: RP-251865)

time budget: 0 TU

Tdoc Limitation: 0 tdoc

## 9.5 XR Enhancements Ph4

(NR\_XR\_Ph4; leading WG: RAN2; REL-20; WID: RP-251866)

Time budget: 0 TU

Tdoc Limitation:0 tdocs

## 9.6 SON/MDT Ph5

(NR\_SON\_MDT\_Ph5-Core; leading WG: RAN3; REL-19; WID: RP-251869)

Time budget: 0 TU

Tdoc Limitation: 0 tdocs

## 9.7 IoT NTN Ph4

(yyy; leading WG: RAN2; REL-20; WID: RP-251867

Time budget: 0.5 TU

Tdoc Limitation: 1 tdocs

### 8.2.1 Organizational

### 8.2.2 Other

Contributions should focus on down-selecting between CP and UP solutions for voice support over NB-IoT-NTN until RAN#110 and any responses to other WG LSs

# 10 6GR Rel-20 - Study on 6G Radio Access Technology

*New WID: Study on 6G Radio; leading WG: RAN1; REL-20; started: Aug. 25; target: May. 27; WID: RP-251881*

*Time budget: 4 TUs*

*Tdoc limit:6. Co-sourced contributions will count towards tdoc limit.*

*Guidelines:*

***Proposal limit****: 7 proposals per contribution. Proposals should focus on addressing the issues that should be discussed, prioritized and addressed at this stage of the work (i.e. proposals on how to advance the work and technical areas to address). Observations to justify proposals, which are copied in conclusion section are recommended. Contributions should address lessons learned from 5G and justify the need/gains. Observations and Proposals should fit in one page in conclusion section at the end of contribution (i.e. reasonable length proposals and font size).*

***Inter-WG and Inter-TSGs issues****: Companies are encouraged to identify inter-WG and/or inter-TSG dependencies/decisions that impact RAN2 design. Intention is to coordinate closely with other WGs and prioritize accordingly.*

*NOTE: AIs will be further refined after RAN1#131bis*

*NOTE: assumptions on 6G DC will be clarified after RAN Plenary*

## 10.1 Organizational

*Reserved for rapporteur inputs, including work plan, skeleton TR and LSs*

## 10.2 General aspects

*Including contributions on principles, guidelines, new services, deployment scenarios and architectures, and other general aspects including support of diverse device types (e.g. categories), UE capability framework, etc.*

*More detailed aspects related to energy efficiency and power savings can be discussed as part of UP/CP/Common design.*

## 10.3 Radio protocol architecture

#### 10.3.1 User plane

*Identification of essential user plane functions and considerations for user plane architecture.*

#### 10.3.2 Control plane

*RRC modelling, connection management, initial and system access, including system information, paging etc..*

#### 10.3.3 Common User plane and Control plane

*Access stratum security aspects, in alignment with requirements from SA3.*

*Transfer of various type of data (including AI/ML data, sensing, etc. ) and general AI/ML framework considerations.*

*NOTEs: Detailed AI/ML use case specific proposals are not expected in this meeting. Specific technical details/procedures related to sensing are not expected until RAN1 starts 6G sensing work.*

### **10.4 Mobility**

*General mobility principles, types (e.g. L3, CHO, LTM, RLM/RLF, cell reselection), and measurements. Including Inter-RAT and intra-RAT mobility.*

# 11 Breakout session reports

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

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

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

## 11.3 Session on NR NTN and IoT NTN

## 11.4 Session on positioning and sidelink relay

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

## 11.6 Session on maintenance and SON/MDT