3GPP TSG-RAN WG2 Meeting #116bis electronic R2-2xxxxxx

Online, January, 2022

Source: RAN2 Chairman (MediaTek)

Title: Proposed Agenda

# 1 Opening of the meeting

**This e-Meeting**

- This e-Meeting follows 3GPP principles for e-Meetings.

- RAN2 116 bis electronic has full decision power, i.e. full decision power to make agreements and approvals according to RAN WG2 terms of reference, without any need to ratify decisions at a later RAN2 or other 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 ftp server instead. Inbox/Drafts folder is used for AT-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 chairman 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

### 2.3.1 TSG RAN 94e

Breif RAN2 centric Report from TSG RAN 94e:

## 2.4 Others

Instructions – UE capabilites

There is no specific coordination for EUTRA UE capabilities. WI specific CRs shall be developed.

abilitie applies

 . This work is done under Agenda Item AI 8.0.2

2: Coordinate centrally ion in CRs of s for all Rel17 WIsThis work is done under Agenda Item AI 8.0.2 and changes are done directly to the mega CRs. , where RAN1 / RAN4 features are treated under a WI-specific Agenda Item instead

3 in the CRs features / RAN/orUE abilitiesuch features

4 R2 Features and capabilities developed only in R2, are developed individually per WI, under WI-specific Agenda Items. Draft CRs (running CRs) for 38.331 and 38.306 are produced. The 306 CRs shall i

5. At the end of R2 117 (Feb meeting), endorsed WI specific UE capability CRs will be merged into the mega CRs, and the mega CRs will be provided to TSG RAN. Any exception to this need to be decided case by case.

Instructions – tdoc limitations (small reminder)

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

- Assigned summary rapporteur input of the summary.

- Email / offline discussions outcomes by discussion rapporteur,

- WI rapporteurs input for WI planning etc,

- TS rapporteur input for TS maintenance

- Assigned Editor of Running CRs input to update the running CR and input of one tdoc to facilitate addressing of CR open issues.

- Contact Company of a LSin that triggers RAN2 action may submit one tdoc to facilitate the LS reply.

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

Tdoc limitations applies to all other submitted tdocs.

# 3 Incoming liaisons

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

# 4 EUTRA corrections Rel-15 and earlier

**This Agenda item will not be treated and no input is expected.**

# 5 Rel-15 WI: New Radio (NR) Access Technology

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: RP-191971)

**This Agenda item will not be treated and no input is expected.**

# 6 Rel-16 NR Work Items

**This Agenda item will not be treated and no input is expected.**

Note: Outcome of long email discussions for AI 6xx may be submitted here. They will be postponed and need to be resubmitted to R2 117.

# 7 Rel-16 EUTRA Work Items

**This Agenda item will not be treated and no input is expected.**

# 8 Rel-17 NR Work Items

## 8.0 General

Please input to 8.0.x. These AIs includes General Aspects regarding Rel 17, both NR and LTE, organizational and planning, common aspects regarding UE caps, RRC parameters, running CRs, need for organized inter-WI coord etc. A main purpose of this AI is to provide opportunity for rapporteurs and other highly interested to illuminate important aspects for the finalization phases of Rel-17. Input to this AI is optional. Note that the multi-WI topic of RACH indication and partitioning is handled under a separate AI.

### 8.0.1 RRC

Note that Rel-17 Cat B RRC CRs (maybe with some exception) are expected to be WI-specific. Including discussions on plan for ASN.1 review.

### 8.0.2 UE capabilities

Feature lists from other groups and UE cap Mega CRs will be treated under this AI, except for NR\_ext\_to\_71GHz-Core for which all UE caps are treated under AI 8.20.2. Specific issues may be reallocated to WI-specific AIs.

### 8.0.3 Gaps Coordination

Tdoc limitation: 1

Under this AI, there will be one offline discussion on the need for / opportunity to achieve improvement (e.g. have better TSes) by coordinating the development of gaps in Rel-17, i.e. determine to what extent to coordinate principles, solutions etc. Way forward will be discussed in a Main session CB session in W2. This AI is complementary to other AIs, and this meeting, gaps technical discussions for each WI will be handled individually under each AI.

## 8.1 NR Multicast

(NR\_MBS-Core; leading WG: RAN2; REL-17; WID: RP-201038)

Time budget: 1.5 TU (reduced)

Tdoc Limitation: 5 tdocs

Email max expectation: 4-7 threads

NOTE. For an issue that potenitally impacts > 1 AI please anyway discuss such issues in one tdoc only.

### 8.1.1 Organizational

Incomimg LSes, Rapporteur docs. Running CRs

### 8.1.2 Stage-2

This topic is deprioritized and will not be treated beyond post-capture of agreements. No input expected.

### 8.1.3 Control Plane

#### 8.1.3.1 General

Including untreated parts of R2-2111510 (from R2 116-e) that shall be resumbitted (at least the non treated proposals incl. the related discussion).

Including **multicast service continuity during handover**: cases for lossless/seamless handover behaviours in addition to ptp-ptp ho, if any, lossless ho during mobility between MBS supporting and non-supporting node.

Including **Broadcast service continuity**, e.g. MBS interest indication, network control, additional triggers, which RRC message, BWP open issues if any. Frequency prioritization Open issues as listed in 38304 running CR, e.g. relation information in USD vs SIBy, how to determine whether reselection candidate bcasts SIBx.

#### 8.1.3.2 RRC 38331

Including configuration of and handling of L1.

Open issues, including those listed in the Running CR and/or Rapporteur Open issue list.

#### 8.1.3.3 UE capabilities

Initial discussion on Features / UE caps developed in RAN2, if any. Note that this AI is complementary to AI 8.0.2. This topic may be treated mainly oiffline.

### 8.1.4 User Plane (MAC, PDCP)

Open issues, including those listed in the 38321 and 38323 Running CRs and/or Rapporteur Open issue list.

## 8.2 MR DC/CA further enhancements

(LTE\_NR\_DC\_enh2-Core; leading WG: RAN2; REL-17; WID: RP-201040)

Time budget: 1 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 4 threads

No documents should be submitted to 8.2. Please submit to.8.2.x

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs).

### 8.2.1 Organizational, Requirements and Scope

Including LSs, any rapporteur inputs and results of running CR email discussions [210]-[215]

Including rapporteur input on remaining open issues needed to close the WI.

### 8.2.2 Efficient activation / deactivation mechanism for one SCG and SCells

No documents should be submitted to 8.2.2. Please submit to.8.2.2.x

#### 8.2.2.1 Deactivation of SCG and UE behaviour in deactivated SCG

Including outcome of [Post116-e][225][R17 DCCA] Remaining details for SCG deactivation (Huawei)

including discussion on essential aspects of BFD/BFR and RRM/RLM that were not covered by the email discussion [Post116-e][225]

Including discussion on any remaining UP details of SCG deactivation (if any) that were not covered by the email discussion [Post116-e][225]

#### 8.2.2.2 Activation of deactivated SCG

Including discussion on UP details of SCG activation, e.g. how the UL data is sent via the MCG leg for split bearers which SCG is deactivated, how UE indicates it has UL data available for SCG/split bearers, etc.

Including discussion on whether to support MAC CE-based SCG (de)activation in Rel-17

#### 8.2.2.3 Other aspects of SCG activation/deactivation

Including essential parts of SCG activation/deactivation that do not fit under other AIs.

Including discussion on MCG link recovery via deactivated SCG (with CR to illustrate the needed Stage-3 details)

IThis agenda item may be deprioritized in this meeting .

### 8.2.3 Conditional PSCell change / addition

No documents should be submitted to 8.2.3. Please submit to.8.2.3.x

#### 8.2.3.1 CPAC procedures from network perspective

Including discussion on network aspects of CPAC that require further interaction with RAN3

Including decision on the name of the new inter-node RRC message for CPAC

#### 8.2.3.2 CPAC procedures from UE perspective

Including discussion on UE behaviour upon CPAC execution, e.g. does UE inform network of the triggering and how?

#### 8.2.3.3 Other CPAC aspects

This agenda item may use a summary document (decision to be made based on submitted tdocs).

Including discussion on whether it's possible to specify CPAC failure handling in Rel-17 (with CR to illustrate the needed Stage-3 details)

Including discussion on whether it's possible to specify CPAC co-existence with CHO in Rel-17 (with CR to illustrate the needed Stage-3 details)

This agenda item may be deprioritized in this meeting .

### 8.2.4 Temporary RS for SCell activation

Including concrete proposals (i.e. TPs) on MAC and RRC details for TRS-based SCell activation

Including discussion on what is configured in RRC and what is indicated in the MAC CE, how to handle Scell activation when some SCells are configured with TRS and others are not

### 8.2.5 UE capabilities

This agenda item may use a summary document (decision to be made based on submitted tdocs).

Including discussion on RAN2 aspects of UE capabilities for SCG deactivation, CPAC and temporary RS.

If changes are proposed against the baseline endorsed in previous meeting, the proposals should illustrate the differences to the baseline illustrated in [R2-2109676](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_116-e/Docs/R2-2109676.zip).

Including discussion on condPSCellChange-r16 as the Prerequisite for R17 MN-initiated CPC, reuse of R15 RLF/BFD UE capabilities for RLF/BFD monitoring on deactivated SCG, support of RLM/BFD monitoring on deactivated SCG as the Prerequisite for Rachless SCG activation, separate capabilities for Activation/Deactivation of SCG in Resume and Reconfiguration cases, etc.

This agenda item may be deprioritized in this meeting.

## 8.3 Multi SIM

(LTE\_NR\_MUSIM-Core; leading WG: RAN2; REL-17; WID: RP-212610)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 4 threads

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs).

### 8.3.1 Organizational, Requirements and Scope

Including LSs, any rapporteur inputs and results of running CR email discussions [233]-[236]

Including rapporteur input on remaining open issues needed to close the WI.

### 8.3.2 Paging collision avoidance

This agenda item may be deprioritized in this meeting.

Including discussion on RAN2 aspects of paging collision avoidance

### 8.3.3 UE notification on network switching for multi-SIM

Including discussion on MUSIM gaps that are not discussed as part of the common measurement gap agenda, e.g. remaining details for periodic/aperiodic gaps, how the gaps are released (via explicit signalling as implicit release is not supported), whether UE is allowed to update UAI after cell reselection in NW B or handover in NW A,

Including Stage-3 details of "configured time" (e.g. how to configure UE to always wait for network response)

*Including discussion on AS and NAS solution interactions and paging filtering*

### 8.3.4 Paging with service indication

This agenda item may be deprioritized in this meeting.

Including remaining details of the paging cause value support and if additional feedback to SA2/CT1 is needed (if any)

### 8.3.5 UE capabilities and other aspects

This agenda item may use a summary document (decision to be made based on submitted tdocs).

Including discussion on UE capabilities related to RAN2-defined features for MUSIM, e.g. capabilities for periodic/aperiodic gaps and capability bit for UE leaving RRC\_CONNECTED state.

Including discussion on any other essential aspects of MUSIM that need to be resolved during Rel-17.

If changes are proposed against the baseline endorsed in previous meeting, the proposals should illustrate the differences to the baseline illustrated in [R2-2109625](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_116-e/Docs/R2-2109625.zip).

## 8.4 NR IAB enhancements

(NR\_IAB\_enh-Core; leading WG: RAN2; REL-17; WID: RP-211548)

Time budget: 1 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 4-5 threads

RP 92e: DAPS-like solutions to be deprioritized.

RP 93e: Enhancements to improve topology-wide fairness and multi-hop latency to be deprioritized. RAN2-led efforts on enhancements to LCG-range extension, RLF indications and local rerouting to continue.

### 8.4.1 Organizational

Including work plan and any other rapporteur input.

### 8.4.2 Open Issues

#### 8.4.2.1 RLF indication

Open issues, e.g. Whether a type-2 indication by dual-connected node can be triggered when (1) the node detects BH RLF on any BH link and (2) it cannot perform re-routing for affected traffic, Whether a type-2 indication may carry info such as available BAP routing ID, Whether a type-2 indication should be (conditionally) propagated (e.g., if no alternative path is available), For transmission of type-3 indication, whether to specify a condition for the success of re-establishment, e.g., successful transmission of RRC Reestablishment Complete.

#### 8.4.2.2 CP-UP separation

Open Issues, e.g. Whether, for IAB-MT’s RRC message that carries F1-C/F1-C-related traffic, the IAB-MT uses split SRB2 via SCG in scenario 2 if f1c-TransferPath-r17 indicates ‘SCG’ or ‘both’ regardless of the primaryPath configuration, Whether, for IAB-MT’s RRC message that contains both F1-C traffic and other information unrelated to IAB, the IAB-MT follows the configuration of F1-C transfer path (if configured) to transmit this RRC message

#### 8.4.2.3 BAP routing

Open Issues, e.g. Inter-topology routing: Configurations of routing, channel mapping and header-rewriting tables, how would the topology be indicated for each of these configurations? Implicitly or explicitly? If implicitly, based on what information carried in the configuration? Inter-topology routing: Additional details of the introduced two new BAP processing steps at the boundary node: (1) determining whether descendant traffic is intra- or inter-topology traffic, and (2) execution of BAP header-rewriting.

#### 8.4.2.4 Other

Any other Open issue

### 8.4.3 UE capabilities

Initial discussion on Features / UE caps developed in RAN2, if any. Note that this AI is complementary to AI 8.0.2. This topic may be treated mainly oiffline.

## 8.5 NR IIoT URLLC

(NR\_IIOT\_URLLC\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210854)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: threads

### 8.5.1 Organizational

*Including email discussions [Post116-e][511][IIoT] MAC running CR update (Samsung) and [Post116-e][512][IIoT] Stage-2 running CR update (Nokia)*

### 8.5.2 Enhancements for support of time synchronization

RAN1 progress if any should be taken into account. \

### 8.5.3 Uplink enhancements for URLLC in unlicensed controlled environments

Remaining open issues.

### 8.5.4 RAN enhancements based on new QoS

Contributions should aim to bring new issues not covered in email discussions already and should be clearly separated in the document from issues covered in the email discussion.

Including email discussion [Post116-e][513][IIoT] QoS survival time (Apple)

RAN enhancements based on new QoS related parameters taken into account SA2 progress

## 8.6 Small Data enhancements

(NR\_SmallData\_INACTIVE-Core; leading WG: RAN2; REL-17; WID: RP-212594)

Time budget: 1.5 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 2 threads

### 8.6.1 Organizational

In coming LSs, rapporteur input for email discussions summaires etc (tdocs in this don’t count towards tdoc limit).

Inputs expected for 38.321 CR (Huawei), 38.331 CR (ZTE), 38.300 CR (Nokia)

Including [Post116-e][506][SDT] RRC running CR update (ZTE), [Post116-e][507][SDT] MAC running CR update (Huawei), and [Post116-e][508][SDT] Stage-2 running CR update (Nokia)

### 8.6.2 User plane common aspects

Overall user plane procedure for SDT (including details of ROHC continuity, BSR/PHR configuration, LCH restrictions, handling of TAT and CG-TAT) )

LG is expected to submit a paper on the proposals not treated from last meeting. Companies are discouraged from submitting documents on those issues again unless their opinon has changed. Focus on new critical open issues

### 8.6.3 Control plane common aspects

Including output of [Post116-e][510][SDT] CCCH and DCCH (Nokia). Only co-sourced CRs and papers are encouraged for this topic.

Other critical CP open issues

### 8.6.4 Aspects specific to RACH based schemes

Contribution on this topic should be submitted on the RACH partitioning/configuration AI, unless something specific to Small data needs to be discussed.

### 8.6.5 Aspects specific to CG based schemes

Including outcome of [Post116-e][509][SDT] CG open issues (Huawei)

Contributions should aim to bring new issues not covered in email discussions already and should be clearly separated in the document from issues covered in the email discussion.

## 8.7 NR Sidelink relay

(NR\_SL\_Relay-Core; leading WG: RAN2; REL-17; WID: RP-212601)

Time budget: 2 TU

Tdoc Limitation: 6 tdocs

Email max expectation: 7 threads

### 8.7.1 Organizational

Incoming LSs, TS updates, rapporteur inputs. This AI is reserved for rapporteur and organizational inputs. Documents in this AI do not count towards the tdoc limitation.

### 8.7.2 L2 relay specific topics

No documents should be submitted to 8.7.2. Please submit to 8.7.2.x.

#### 8.7.2.1 Control plane procedures

Including connection management, SI delivery, paging, access control for remote UE. This agenda item will utilise a summary document.

#### 8.7.2.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases.

Including outcome of [Post116-e][604][Relay] Remaining issues on service continuity (Xiaomi)

#### 8.7.2.3 Adaptation layer design

Including bearer mapping, remote UE identification, security aspects if any. This agenda item will utilise a summary document.

#### 8.7.2.4 QoS

Mechanisms for E2E QoS management. This AI will not be treated online. Critical issues, if any, may be handled by email. This agenda item will utilise a summary document.

### 8.7.3 L2/L3 common topics

For any remaining stage 3 issues related to discovery and (re)selection. No documents should be submitted to 8.7.3. Please submit to 8.7.3.x.

#### 8.7.3.1 Discovery

Including 5G ProSe Direct Discovery for the non-relaying case. Re-using LTE discovery as baseline. This agenda item may utilise a summary document (decision to be made based on submitted tdocs).

#### 8.7.3.2 Relay re/selection

Re-using LTE re/selection as baseline. This agenda item may utilise a summary document (decision to be made based on submitted tdocs).

## 8.8 RAN slicing

(NR\_Slice -Core; leading WG: RAN2; REL-17; WID: RP-212534)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 2 threads

Contributions should illustrate the Stage-3 details of the proposals (e.g. in an Annex containing TP against the running CRs).

### 8.8.1 Organizational

Including LSs, any rapporteur inputs and results of running CR email discussions [243]-[245]

Including rapporteur input on remaining open issues needed to close the WI.

### 8.8.2 Cell reselection

Including discussion on finalization of the "slice group" for cell reselection, in which SIB the slicing information for reselection is broadcast and how the serving cell priority is handled in reselection process

Including discussion on whether additional mechanisms beyond solution 4 are needed

Including discussion on how to resolve slice groups at TA boundaries e.g. if the TAs support different slice groups, what are the RAN2 impacts?

Including outcome of [Post116-e][242][Slicing] Slice-based cell re-selection algorithm (Ericsson)

### 8.8.3 RACH

Including discussion on RAN slicing-specific RACH prioritization impacts that are not discussed as part of the common RACH prioritization agenda (if any)

NOTE: The common discussion on Rel-17 RACH partitioning will be discussed under AI 8.18. This AI will only consider RACH partitioning from slicing perspective.

This agenda item may be deprioritized in this meeting.

### 8.8.4 UE capabilities

This agenda item may use a summary document.

Including discussion on UE capabilities related to RAN2-defined features for RAN slicing. If changes are proposed against the baseline endorsed in previous meeting, the proposals should illustrate the differences to the baseline illustrated in [R2-2109627](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_116-e/Docs/R2-2109627.zip).

## 8.9 UE Power Saving

(NR\_UE\_pow\_sav\_enh-Core; leading WG: RAN2; REL-17; WID: RP-212632)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

RP 93e: PEI: Support PDCCH-based PEI as the only option.

### 8.9.1 Organizational

E.g. Rapporteur input. Incoming LS. Running CRs etc

### 8.9.2 Open Issues

#### 8.9.2.1 Paging Sub-grouping and Paging Early Indication

Focus on open issues, e.g. TBD marks in Running CR 38304 (R2-2111664). Issues with inter-group consenquences has priority, e.g. with consequences for R3, SA2 etc.

#### 8.9.2.2 TRS/CSI-RS for idle/inactive

Note that for most open issues we have been waiting for RAN1 input. There will be an activity to take RAN1 progress into account, even without tdocs input.

#### 8.9.2.3 RLM/BFD relaxation

#### 8.9.2.4 Other

### 8.9.3 UE Capabilities

For the progress of RAN2 developed capabilities, there will be an initial offline effort, scope to take current agreements into account for Running CRs, and determine whether any additional RAN2 capability is needed. Feautre lists of other groups are taken into account under AI 8.0.2

## 8.10 NR Non-Terrestrial Networks (NTN)

(NR\_NTN\_solutions-Core; leading WG: RAN2; REL-17; WID: RP-211557)

Time budget: 1.5 TU

Tdoc Limitation: 4 tdocs + 1 for UE caps

Email max expectation: 5 threads

### 8.10.1 Organizational

LSs, rapporteur inputs and other organizational documents. Rapporteur inputs and other pre-assigned documents in this AI do not count towards the tdoc limitation.

### 8.10.2 User Plane

#### 8.10.2.1 RACH aspects

Focus on TA reporting aspects

#### 8.10.2.2 Other MAC aspects

Focus on remaining aspects of timers, HARQ, and LCP including CG/SPS aspects

#### 8.10.2.3 RLC and PDCP aspects

This sub-AI will not be treated at R2-116bis-e. No contributions are expected

### 8.10.3 Control Plane

#### 8.10.3.1General aspects

Including Earth fixed/moving beams related issues, TAC update / reporting and LCS aspects (i.e. UE location information reporting)

#### 8.10.3.2 Idle/Inactive mode

Focus on system information aspects

#### 8.10.3.3 Connected mode

This sub-AI will not be treated at R2-116bis-e. No contributions are expected

### 8.10.4 UE capabilities

Including Features / UE caps developed in RAN2. Note that this AI is complementary to AI 8.0.2. NOTE please don’t input on aspects treated in the email discussion.

## 8.11 NR positioning enhancements

(NR\_pos\_enh-Core; leading WG: RAN1; REL-17; WID: RP-210903)

Time budget: 2 TU

Tdoc Limitation: 7 tdocs

Email max expectation: 7 threads

### 8.11.1 Organizational

Rapporteur input. Incoming LS etc. This AI is reserved for rapporteur and organizational inputs; documents in this AI do not count towards the tdoc limitation.

### 8.11.2 Latency enhancements

Enhancements of signalling, and procedures for improving positioning latency of the Rel-16 NR positioning methods, for DL and DL+UL positioning methods. Including scheduled location time, preconfigured assistance data, UE capability storage, measurement gap and PRS priority; any other topics will be treated at lower priority. This agenda item will utilise a summary document.

### 8.11.3 RRC\_INACTIVE

Methods, measurements, signalling and procedures to support positioning for UEs in RRC\_ INACTIVE state, for UE-based and UE-assisted positioning solutions. UL and DL+UL NR positioning methods and gNB positioning measurements for UEs in RRC\_INACTIVE are treated at lower priority. This agenda item will utilise a summary document.

### 8.11.4 On-demand PRS

Specify UE-initiated and LMF-initiated on-demand transmission and reception of DL PRS for DL and DL+UL positioning for UE-based and UE-assisted positioning solutions.

Including outcome of [Post116-e][601][POS] Network control and UE request for on-demand PRS parameters (Ericsson)

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination.

Including outcome of [Post116-e][602][POS] Stage 2 baseline for integrity assistance data (Swift)

### 8.11.6 A-GNSS enhancements

Including support of BDS B2a and B3I signals and support of NavIC. This agenda item will not be treated online. Critical issues, if any, may be handled by email.

### 8.11.7 Accuracy enhancements

Input on the accuracy enhancement objectives led by RAN1. This agenda item will not be treated online. Critical issues, if any, may be handled by email.

### 8.11.8 Other

Input on other WI objectives. This agenda item will not be treated online. Critical issues, if any, may be handled by email.

## 8.12 Reduced Capability

(NR\_redcap-Core; leading WG: RAN1; REL-17; WID: RP-211574)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 4 threads

### 8.12.1 Organizational

LSs, rapporteur inputs and other organizational documents. Rapporteur inputs and other pre-assigned documents in this AI do not count towards the tdoc limitation.

### 8.12.2 Framework for reduced capabilities

No contribution is expected to this agenda item but directly to the sub-agenda items.

#### 8.12.2.1 Definition of RedCap UE type and reduced capabilities

Including discussion on possible "fallback operation"

#### 8.12.2.2 Identification, access and camping restrictions

Focus on system information aspects (common aspects related to RACH partitioning shall be submitted to 8.18)

Also including discussion on "NCD-SSB"

### 8.12.3 UE power saving and battery lifetime enhancement

No contribution is expected to this agenda item but directly to the sub-agenda items.

#### 8.12.3.1 eDRX cycles

Extended DRX enhancements for RRC Inactive and Idle.

This sub-AI will not be treated at R2-116bis-e. No contributions are expected

#### 8.12.3.2 RRM relaxations

Measurement-based stationarity criterion and related not-at-cell-edge criterion, for RRC Inactive, Idle and Connected.

Main focus on the "FFS: whether UE Assistance Information or legacy measurement reporting framework should be used by UE to report its relaxation status" (with the intention to close the discussion and not come back to this in February meeting)

## 8.13 SON/MDT

(NR\_ENDC\_SON\_MDT\_enh-Core; leading WG: RAN3; REL-17; WID: RP-201281)

Time budget: 1 TU

Tdoc Limitation: 6 tdocs

Email max expectation: 6 threads

### 8.13.1 Organizational

Including outcome of [Post116-e][887][SON/MDT] Running 38.331 for introducing R17 SON (Ericsson)

Including outcome of [Post116-e][889][SON/MDT] Running 38.331 for introducing R17 MDT (Huawei)

Including outcome of [Post116-e][879][SON/MDT] Running R17 38.314 (CMCC)

Including outcome of [Post116-e][897][SON/MDT] Running R17 37.320 (CMCC, Nokia)

### 8.13.2 SON

#### 8.13.2.1 Handover related SON aspects

#### 8.13.2.2 2-step RA related SON aspects

Including outcome of [Post116-e][887.5][SON/MDT] Leftover issues on SON (Ericsson )

#### 8.13.2.3 Other WID related SON features

### 8.13.3 MDT

#### 8.13.3.1 Immediate MDT enhancements

#### 8.13.3.2 Logged MDT enhancements

### 8.13.4 L2 Measurements

## 8.14 NR QoE

(NR\_QoE-Core; leading WG: RAN3; REL-17; WID: RP-211406)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3-4 threads

Focus on adressing open issues

### 8.14.1 Organizational

LS in. Rapporteur input. Running CRs.

### 8.14.2 RAN Visible QoE

### 8.14.3 Open Issues

Open issues on QoE configuration, reporting, start stopincluding Pause Resume, mobility etc.

Including outcome of [Post116-e][080][eQoE] Mobility (Ericsson)

### 8.14.4 UE capabilities

Initial discussion on UE caps.

## 8.15 NR Sidelink enhancements

(NR\_SL\_enh-Core; leading WG: RAN1; REL-17; WID: RP-202846)

Time budget: 1.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 6 threads

### 8.15.1 Organizational

Including incoming LSs, rapporteur inputs, etc.

### 8.15.2 SL DRX

Including [Post116-e][715], [Post116-e][716], [Post116-e][718], etc.

### 8.15.3 Resource allocation enhancements RAN2 scope

Including RAN2 discussion scope on random selection, partial sensing and inter-UE coordination. This agenda item may utilize a summary document (TBD).

## 8.16 NR Non-Public Network enhancements

(WI NG\_RAN\_PRN\_enh-Core; leading WG: RAN3; REL-17; WID: RP-202363)

Time budget: 0.5 TU

Tdoc Limitation: 1 tdocs

Email max expectation: 1 threads

NOTE at current meeting, only UE capabilites are expected to be treated. Remaining issue(s) wil be treated at R2 117 (this WI will have an AI at next meeting regardless current TU allocation).

### 8.16.1 Organizational

Rapporteur input, incoming LS etc. Running CRs.

### 8.16.2 Issues and Corrections

Including Issues and Corrections if any to support SNPN with subscription or credentials by a separate entity, support UE onboarding and provisioning for NPN and support of IMS voice and emergency services for SNPN.

Not to be treated. No input is expected.

### 8.16.3 UE capabilities

This topic is expected to be treated offline only.

## 8.17 NR feMIMO

(NR\_feMIMO-Core; leading WG: RAN1; REL-17; WID: RP-212535)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

### 8.17.1 Organizational

Rapporteur input, incoming LS etc.

### 8.17.2 General and RRC

High level impacts and high level design for inter-cell beam mgmt. Impacts of mTRP. RRC impacts of feMIMO.

Including [Post116-e][086][feMIMO] RRC (Ericsson) which includes e.g. the related modelling for ICBM TCI state handling and UL power control, and includes parameter designs where RAN1 has indicated upto RAN2, which all have high priority.

Including RRC impacts of all L1 parameters.

### 8.17.3 Other

Other RAN2 impacts, BFD/BFR. MAC.

## 8.18 RACH indication and partitioning

Time budget: Equivalent to 0.5-1 TU

Tdoc Limitation: 2 tdocs

Expected to cover WIs SDT, CovEnh, RedCap, RAN slicing. RA specific aspects from the different WI should be covered in this AI given the RA experts are all there.

### 8.19.1 Common signalling framework

Including output of [Post116-e][514][RACH partitioning] Signaling design (Ericsson) and any other input for RRC signalling (focus company tdocs on issues that are not addressed in [514] email)

### 8.19.2 Common aspects of RACH procedure

Including output of [Post116-e][515][RACH partitioning] MAC Procedure aspects (ZTE) and any other inputs not treated in 515, including RACH procedure and input for handling of the common MAC aspects including handling of RACH initiation, retransmissions etc

## 8.19 Coverage Enhancements

(NR\_cov\_enh-Core; leading WG: RAN1; REL-17; WID: RP-211566)

Time budget: 0.5

Tdoc Limitation: 1 tdoc

Common aspects related to RACH indication (in MSG1) / RACH partitioning shall be submitted to 8.18

### 8.19.1 Organizational

Rapporteur input, incoming LS etc.

### 8.19.2 General

RAN2 impact tech proposals.

## 8.20 Extending NR operation to 71GHz

(NR\_ext\_to\_71GHz-Core; leading WG: RAN1; REL-17; WID: RP-212637)

Time budget: 0.5

Tdoc Limitation: 2 tdocs

Note: RAN2 is to prioritize protocol support of RAN1 design and not on optimizations on items not discussed in RAN1

### 8.20.1 Organizational

Including LSs, any rapporteur inputs and results of running CR email discussions [217] and [218]

Including input running Stage-2 CR from the specification rapporteur (which does not count against the Tdoc limits)

Including rapporteur input on remaining open issues needed to close the WI.

### 8.20.2 General

Including discussion on UP aspects based on RAN1 progress (e.g. RLC RTT, RACH, L2 buffer sizes)

Including discussion on latest L1 parameters from RAN1 that were not yet accounted for in the running CR discussions

Including discussion on RRC and MAC impacts not yet covered in the running CR discussions

Including further discussion on UE capability aspects based on latest information from RAN1/4 and previous RAN2 meeting (e.g. FR2-1/2 differentiation, whether to use per-band signalling for FR2-2-specific capabilities, whether L2 buffer requires additional capabilities etc.)

Including discussion on whether any existing features require modifications due to FR2-2 (e.g. IDC, LBT)

## 8.21 TEI17

Time budget: 1.5 TU

Note that TEI17 will have low priority in 2022 Q1. Normal treatment resumed in Q2.

### 8.21.1 TEI proposals initiated by other groups

Including incoming LSes. This AI may be deprioritized at current meeting.

### 8.21.2 TEI proposals initiated by RAN2

Tdoc Limitation: No input on new (= not agreed to be progressed) proposals is expected at current meeting, Exception: The long email discussion after last meeting will be treated. Including outcome of [Post116-e][087][TEI17] Explicit SI start position for SI Scheduling (Ericsson)

## 8.22 NR and MR-DC measurement gap enhancements

(NR\_MG\_enh-Core; leading WG: RAN4; REL-17; WID: RP-211591)

Time budget: 0.5

Tdoc Limitation: 3 tdocs

Includes: Pre-configured MG pattern(s) (fast MG configuration) - protocol impacts of the mechanisms of activation/deactivation of MG following a DCI or timer based BWP switch, e.g., per BWP MG configuration based on RAN4 input,
Multiple concurrent and independent MG patterns [RAN4, RAN2]. Specification of protocol impacts for multiple concurrent and independent MG patterns based on RAN4 input
Network Controlled Small Gap (NCSG) specification - Procedures and signaling for NCSG patterns.

### 8.22.1 Organizational

Rapporteur Input

### 8.22.2 Pre-configured MG patterns

### 8.22.3 Multiple concurrent and independent MG patterns

### 8.22.4 Network Controlled Small Gap

## 8.23 Uplink Data Compression (UDC)

(NR\_UDC\_enh-Core; leading WG: RAN2; REL-17; WID: RP-211203)

Time budget: 0.5

Tdoc Limitation: 1 tdocs

### 8.23.1 Organizational

Rapporteur input etc.

### 8.23.2 General

## 8.24 NR R17 Other

Time budget: 1.5 TU

Includes items and topics without specific R2 Agenda Item. Includes LS in for R17 items not in a specific R2 Agenda Item. In general incoming LSes are always treated with high priority regardless if specific AI or TU allocation exists.

### 8.24.1 RAN4 led Items

e.g. TxD, TX switching, BCS4/5

### 8.24.2 RAN1 led Items

e.g. DSS (expect that DSS work is initiated by LS from R1)

### 8.24.3 Other

# 9 Rel-17 EUTRA Work Items

## 9.0 EUTRA Rel-17 General

Tdoc Limitation: 0 tdocs

No documents should be submitted to 9.0. Please submit to 9.0.x

### 9.0.1 L1 parameters and cross-WI RRC aspects

Including RRC details on L1 parameters for Rel-17 WIs that require discussion in the common session or are related to multiple Rel-17 WIs.

**This Agenda item will not be treated and no input is expected.**

### 9.0.2 Feature Lists and UE capabilities

Corrections to UE capabilities should be taken up with the 36.331 and 36.306 specification editors before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

**This Agenda item will not be treated and no input is expected.**

## 9.1 NB-IoT and eMTC enhancements

(NB\_IOTenh4\_LTE\_eMTC6-Core; leading WG: RAN1; REL-17; WID: RP-211340)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 4 threads

### 9.1.1 Organizational

Including outcome of [Post116-e][306][NBIOT/eMTC R17] 36.300 running CR (Huawei)

Including outcome of [Post116-e][307][NBIOT/eMTC R17] 36.331 running CR (Qualcomm)

Including outcome of [Post116-e][308][NBIOT/eMTC R17] 36.304 running CR (Nokia)

Including outcome of [Post116-e][309][NBIOT/eMTC R17] 36.306 running CR (ZTE)

### 9.1.2 NB-IoT neighbor cell measurements and corresponding measurement triggering before RLF

Including outcome of [Post116-e][310][NBIOT/eMTC R17] RLF measurements (Qualcomm)

Contributions invited on open issues not covered by email discussion

### 9.1.3 NB-IoT carrier selection based on the coverage level, and associated carrier specific configuration

Including outcome of [Post116-e][311][NBIOT/eMTC R17] NB-IoT carrier selection (ZTE)

Contributions invited on open issues not covered by email discussion

### 9.1.4 Other

Includes WI objectives led by other WGs.

## 9.2 NB-IoT and eMTC support for NTN

(LTE\_NBIOT\_eMTC\_NTN; leading WG: RAN1; REL-17; WID: RP‑211601)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs (+1 for 9.2.5)

Email max expectation: 3 threads

RP 93e: An LS was sent to SA asking about NAS support for discontinous coverage and WUS. Understanding that RAN work on discontinous coverage shall continue for now (also WUS work if any is needed).

### 9.2.1 Organizational

Rapporteur Input, incoming LSes

On specific request, we will reply to the following LS (it was already replied from NR NTN session for NR). LS contact company is asked to organize such reply. If desired, companies may submit one more tdoc beyond limit for information, for the purpose to help facilitating the reply.

R2-2109307 LS on extended NAS supervision timers at satellite access (C1-215074; contact: Ericsson)       CT1 LS in      Rel-17    5GSAT\_ARCH-CT       To:RAN2 Cc:RAN2

### 9.2.2 Support of Non continuous coverage

Open Issues: which IEs to reuse, how to transfer the IEs to the UEs, whether any other aspects need to be specified.

### 9.2.3 User Plane Impact

Expect to converge on UP agreements based on NR NTN progress. Expect to address Open Issues.

### 9.2.4 Control Plane Impact

Expect to converge on CP agreements based on NR NTN progress. Expect to address open issues, e.g. as indicated in the RRC Running CR: TAC removal in SIB, NB-IOT: whether TAC list is per PLMN or shared between PLMN, Trigger(s) for reading NTN SIB, Handling of UL Synchronisation  validity timer / timer expiry, Need for a mechanism to prevent legacy / non-NTN capable UE to access a NTN cell, Location reporting via RRC, Handling of GNSS fix validity.

RRC signalling details to be addressed offline.

### 9.2.5 UE Capabilities

For an initial discussion of UE capabilities, there may be an offline effort,

## 9.3 EUTRA R17 Other

Time budget: 0 TU

Tdoc Limitation: No limitation but the AI may be entirely deprioritized depending on available time.

Email max expectation: 2 threads

**This agenda item may be deprioritized in this meeting.**

**For TEI17, ONLY incoming LSes and tdocs related to replying to the LSs.**

## 9.4 NR and EUTRA Inclusive language

Time budget: N/A

RAN coordinator for inclusive language is Gino Masini (Ericsson).

CRs were endorsed/agreed-in-principle at R2#112-e. Final approval is expected when R17 TSes are to be created and at that point CRs need to be updated towards latest TS version and submitted again.

Including any updates to the RAN2-endorsed inclusive language CRs ( e.g. for inter-group consistency, inter-group review etc)

**This Agenda item will not be treated and no input is expected.**