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

Online, November, 2021

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 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 93e

Breif RAN2 centric Report from TSG RAN 93e:

0) RAN2 Status Report in RP-211610 received no comments.

1) RAN time plan in RP-212587 was endorsed.

2) Endorsed Multi-WG TU plan is now in RP-212638.

3) n77: Complete set of CRs were approved.

4) R2 Scope related R17:

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

 eIAB: lower priority for part of topology-wide fairness and multi-hop latency objectives, see also AI 8.4.

 SDT: WID scope updated to align with status in R2, see WID update.

 Power Saving: Paging Related - PDCCH based PEI agreed and R3 work clarified, meaning no need to change R2 scope

 SL Relay: WID clarifications on 5G ProSe Discovery, see WID update.

 See also other R17 WID updates for indirect impacts.

## 2.4 Others

RRC parameters

- RAN1 is expected to deliver RRC parameters list from Oct and Nov meetings.

- In general and as usual, RRC parameters specified by other groups will be taken into account in WI-specific CRs developed in the WI-specific sessions.

UE capabilities

- RAN1 is expected to deliver UE feature list from Nov meeting.

- For non-RAN1-centric topics, and in particular for major WIs it is recommended to start UE capabilities discussions in RAN2 at R2 116-e.

Rapporteur Changes

**Spec Former rapporteur Proposed new rapporteur**

36.306 Ravi Kuchibhotla (Motorola Mobility)      Hyung-Nam Choi (Motorola Mobility)

# 3 Incoming liaisons

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

# 4 EUTRA corrections Rel-15 and earlier

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

## 4.1 NB-IoT corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session. Common NB-IoT/eMTC parts treated jointly with 4.2.

## 4.2 eMTC corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session. Common NB-IoT/eMTC parts treated jointly with 4.1.

## 4.3 V2X and Sidelink corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session.

## 4.4 Positioning corrections Rel-15 and earlier

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

## 4.5 Other LTE corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session.

Purely editorial corrections should be avoided, text enhancements may be deprioritized. Corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

# 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)

Only essential corrections. Please submit CRs marked “NR\_newRAT-Core, TEI16” under one of the below clauses.

## 5.1 Organisational

Incoming LSs, etc.

## 5.2 Stage 2 corrections

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

### 5.2.1 TS 3x.300

### 5.2.2 TS 37.340

## 5.3 User Plane corrections

### 5.3.1 MAC

### 5.3.2 RLC PDCP SDAP

## 5.4 Control Plane corrections

### 5.4.1 NR RRC

#### 5.4.1.1 Connection control

Including L1 Parameters, L2 Parameters, Connection establishment and release, Connection reconfiguration (also reconfig with sync, Handover), Connection resume and release with RRC\_INACTIVE state, Security procedures, re-establishment, RRC processing delay requirements etc.)

Including outcome of [Post115-e][054][NR15] Common Fields Dedicated Signalling (Ericsson)

#### 5.4.1.2 Inter-Node RRC messages

#### 5.4.1.3 Other

Including e.g. System Information, RRM and Measurements

### 5.4.2 LTE changes

LTE specific changes for this WI. Changes that are applied to both LTE and NR shall be treated together under respective Agenda item other than this one.

### 5.4.3 UE capabilities

Including outcome of [Post115-e][087][NR15] Simultaneous Rx/Tx cap finer granularity (NTT DOCOMO)

### 5.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items (5.4.1.x)

## 5.5 Positioning corrections

Corrections to both the stage 2 and stage 3 aspects related to positioning. Stage 2 CRs 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.

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

# 6 Rel-16 NR Work Items

Essential corrections only.

Tdoc Limitation: **18 tdocs** in total for all sub agenda items, or the restriction for each sub-AI, whichever is more restrictive.

## 6.1 Common

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

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target Aug 20; WID: RP-200840)

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; Closed June 20; WID: RP-192926).

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; Completed: Jun 20; WID: RP-200797)

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; Completed Jun 20; WID: RP-200494).

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; Completed: June 20; WID: RP-200085).

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; Completed; Mar 20; WID: RP-190713)

(RACS-RAN-Core, leading WG: RAN2; REL-16; started: Mar 19; completed: Jun 20; WID: RP-191088)

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; completed: June 20; WID: RP-200122)

(NR\_eMIMO-Core, leading WG: RAN1; REL-16; started: Jun 18; target; Aug 20; WID: RP-200474;)

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; Completed: Jun 20; WID: RP-191997;)

(NR\_L1enh\_URLLC-Core, leading WG: RAN1; REL-16; Completed: June 20; WID: RP-191584)

(LTE\_NR\_DC\_CA\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; Target Aug 20; WI RP-200791)

(NR\_Mob\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; Completed June 20; WID: RP-192277).

(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 6.1.X. LTE-only corrections, see AI 7.

### 6.1.1 Organisational

Incoming LSs, etc.

### 6.1.2 Stage 2 corrections

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

#### 6.1.2.1 TS 3x.300

#### 6.1.2.2 TS 37.340

### 6.1.3 User Plane corrections

#### 6.1.3.1 MAC

#### 6.1.3.2 RLC

#### 6.1.3.3 PDCP

#### 6.1.3.4 SDAP

#### 6.1.3.5 BAP

### 6.1.4 Control Plane corrections

#### 6.1.4.1 NR RRC

In case a correction need to mirrored for both NR RRC and LTE RRC, the corrections should be submitted under the same AI (i.e. the sub-AIs below this).

##### 6.1.4.1.1 Connection control

Including L1 Parameters, L2 Parameters, Connection establishment and release, Connection reconfiguration (also reconfig with sync, Handover), Connection resume and release with RRC\_INACTIVE state, Security procedures, re-establishment, RRC processing delay requirements etc.

##### 6.1.4.1.2 RRM and Measurements

##### 6.1.4.1.3 System Information and Paging

##### 6.1.4.1.4 Inter-Node RRC messages

##### 6.1.4.1.5 Other

#### 6.1.4.2 LTE changes

LTE-specific changes for these WIs. Changes that are applied to both LTE and NR shall be treated together under respective Agenda item other than this one.

#### 6.1.4.3 UE capabilities

#### 6.1.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items

## 6.2 NR V2X

(5G\_V2X\_NRSL-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Aug 20; WID: RP-200129).

Documents in this agenda item will be handled in a break out session

Tdoc Limitation: See tdoc limitation for Agenda Item 6

CR rapporteurs will take care of miscellaneous CRs to collect small changes. Please contact / coordinate with CR rapporteur company first for small changes (e.g. non-controversial clarification/correction, editorial correction, etc.).

### 6.2.1 General and Stage-2 corrections

Including incoming LSs, rapporteur inputs, etc.

### 6.2.2 Control plane corrections

This agenda item may utilize a summary document on RRC (Huawei).

### 6.2.3 User plane corrections

This agenda item may utilize a summary document on MAC (LG).

## 6.3 NR Positioning Support

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: RP-200218).

(NR TEI16 Positioning)

Documents in this agenda item will be handled in a break out session

Tdoc Limitation: See tdoc limitation for Agenda Item 6

### 6.3.1 General and Stage 2 corrections

Including incoming LSs, Including impact to 36.305 and 38.305. 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.

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

### 6.3.2 RRC corrections

Including impact to 36.331, 38.331, and 38.306.

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

### 6.3.3 LPP corrections

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

### 6.3.4 MAC corrections

## 6.4 SON/MDT support for NR

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; Completed June 20; WID: RP-191776).

Documents in this agenda item will be handled in a break out session

Tdoc Limitation: See tdoc limitation for Agenda Item 6

### 6.4.1 General and stage-2 corrections

Including incoming LSs, TS 37.320 corrections

### 6.4.2 TS 38.314 corrections

### 6.4.3 RRC corrections

# 7 Rel-16 EUTRA Work Items

Essential corrections

# 7 Rel-16 EUTRA Work Items

Only essential corrections. No documents should be submitted to 7. Please submit to 7.x

## 7.1 EUTRA Rel-16 General

No documents should be submitted to 7.1. Please submit to.7.1.x

Purely editorial corrections should be avoided, text enhancements may be deprioritized. Corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

### 7.1.1 Cross WI RRC corrections

Including RRC corrections that impact multiple WIs and require discussion in the common session.

### 7.1.2 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.

## 7.2 Additional MTC enhancements for LTE

(LTE\_eMTC5-Core; LTE\_eMTC5-Core; leading WG: RAN1; REL-16; started: Jun 18; Completed: June 20; WID: RP192875;)

Documents in this agenda item will be handled in a break out session.

Some sub-items in 7.2 and 7.3 may be treated jointly.

## 7.3 Additional enhancements for NB-IoT

(NB\_IOTenh3-Core; leading WG: RAN1; REL-16; started: Jun 18; Completed: June 20; WID: RP-200293)

Documents in this agenda item will be handled in a break out session

Some sub-items in 7.2 and 7.3 may be treated jointly.

## 7.4 LTE Other WIs

(LTE\_feMob-Core; leading WG: RAN2; REL-16; started: Jun 18; Completed: June 20; WID: RP-190921)

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

(Documents relating to Rel-16 LTE but for which there is no existing RAN WI/SI, e.g. LSs from CT/SA requesting RAN2 action)

Including TEI16 corrections and issues that do not fit under any other topic.

Purely editorial corrections should be avoided, text enhancements may be deprioritized. Corrections should be taken up with the specification editor before submitting to avoid CR duplication. If this is not done, the contribution may not be treated.

For LTE mobility enhancements, only corrections that are LTE-specific should be submitted to this AI. Corrections that impact or are common with NR mobility enhancements should be submitted to 6.1.X instead.

## 7.5 LTE Positioning

(NavIC, LTE TEI16 Positioning)

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

# 8 Rel-17 NR Work Items

# 8.0 Organizational

General Aspects regarding Rel 17, both NR and LTE, organizational and planning,TS creation, common aspects regarding UE caps, RRC parameters, running CRs, need for inter WI coord etc. This is not expected to be a major topic and company input is not strictly required. The main purpose of this AI is to provide opportunity for rapporteurs and other interested to illuminate important aspects for the finalization phases of Rel-17.

## 8.1 NR Multicast

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

Time budget: 2 TU

Tdoc Limitation: 7 tdocs

Email max expectation: 4-7 threads

### 8.1.1 Organizational, Requirements, Scope and Architecture

Including stage-2 proposals. Incomimg LSes, Rapporteur docs. Running CRs.

### 8.1.2 L2 Centric topics

Including outcome of [Post115-e][092][MBS] Remaining User plane issues (Lenovo)

#### 8.1.2.1 Multicast Service Continuity

Includes Mobility, PTM PTP switch, activation deactivation PTMPTP Can also include related CP enablers and assupmtions, those directly applicable..

#### 8.1.2.2 Scheduling and power saving

Includes Broadcast Scheuling and Multicast Scheduling, Group scheduling, DRX, SPS.. Can also include CP enablers and assumptions, only those directly applicable.

#### 8.1.2.3 Other

### 8.1.3 L3 Centric topics

Including outcome of [Post115-e][091][MBS] Remaining control plane issues (Huawei)

#### 8.1.3.1 Broadcast Service Continuity

Frequency aspects, Impact to cell selection/reseelction (e.g. frequency prioritization). Enablers and assumptions for Broadcast reception in Connected Mode, interest indication, BWP assuptions/requirements for this particular case.

#### 8.1.3.2 Notifications

Notification for Multicast activation. Change Notifications MCCH etc for broadcast.

#### 8.1.3.3 Other

MCCH contents and details. General RRC aspects. BWP. UE capabilities.

## 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 (note that email discussion outcome documents or rapporteur inputs do not count against Tdoc limitations)

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 and any rapporteur inputs (which do not count against Tdoc limits).

### 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

Including discussion on UP details of SCG deactivation (e.g. PDCP/MAC impacts, bearer handling) - UP aspects will be prioritized in this meeting.

Including whether the UE performs RACH at PSCell change

#### 8.2.2.2 UE measurements and reporting in deactivated SCG

Including discussion on details of BFD and RLM for deactivated SCG (e.g. while the SCG is deactivated, does UE report S-RLF/BFD immediately upon detection according to existing procedures or is there a different behaviour?)

Including discussion on RRM measurements when SCG is deactivated (e.g. is there need to have anything different than currently for activated SCG?)

#### 8.2.2.3 Activation of deactivated SCG

Including outcome of [Post115-e][219][R17 DCCA] UE-initiated SCG activation (Huawei)

Including discussion on UP details of SCG activation (PDCP/MAC impacts, bearer handling, ...) - UP aspects will be prioritized in this meeting.

Including discussion on SCG activation details, e.g. RACH resource configuration and how network indicates whether random access is used, whether to support configuring RACH resources to UE before SCG activation (with Stage-3 TP to illustrate the impacts)

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

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

This 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 remaining details of network coordination for CPAC preparation/exceution (e.g. whether T-SN is informed on the execution conditions, whether the execution conditions can be updated after the T-SN response , coordination for measurement for gap configuration at source SN configuration update after T-SN response and before CPC configuration to the UE).

Including decision on working assumption for solution 2

Including outcome of [Post115-e][216][R17 DCCA] Inter-node message design (Ericsson)

#### 8.2.3.2 CPAC procedures from UE perspective

Including discussion on UE measurements for CPAC purposes (e.g. details of measurement events).

Including outcome of [Post115-e][217][R17 DCCA] Support of A3/A5 for inter-SN CPC (Ericsson)

#### 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 CPAC failure handling (e.g. will we have CHO recovery - like procedure for CPAC?) and CPAC co-existence with CHO (e.g. what, if anything, is needed to enable using both CPAC and CHO?)

### 8.2.4 Temporary RS for SCell activation

Including outcome of [Post115-e][218][R17 DCCA] TRS-based SCell activation (OPPO)

### 8.2.5 UE capabilities

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

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

This agenda item may be deprioritized in this meeting (apart from the email discussion outcome).

Including outcome of [Post115-e][214][R17 DCCA] UE capabilities (Intel)

## 8.3 Multi SIM

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

Time budget: 1 TU

Tdoc Limitation: 4 tdocs (note that email discussion outcome documents or rapporteur inputs do not count against Tdoc limitations)

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 and any rapporteur input.

### 8.3.2 Paging collision avoidance

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

Including discussion on RAN2 aspects of paging collision avoidance

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

Including discussion on remaining details for periodic/aperiodic gaps, e.g. MUSIM gap support for MR-DC,how the gaps are released (i.e. implicitly or explicitly), need for additional gap assistance information (e.g. gap purpose).

Including discussion on MUSIM assistance information from UE to network (e.g. UAI or other signalling, whether to reuse some parts of existing signalling, possibility of "early return")

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

### 8.3.4 Paging with service indication

Including details of the paging cause value support and, if necessary, discussion on additional feedback to SA2

Including outcome of [Post115-e][236][MUSIM] Paging with service indication (Huawei)

### 8.3.5 UE capabilities and other aspects

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

This agenda item may be deprioritized in this meeting.

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

## 8.4 NR IAB enhancements

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

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 3-4 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 Enhancements to improve topology-wide fairness multi-hop latency and congestion mitigation

### 8.4.3 Topology adaptation enhancements

Includign outcome of [Post115-e][088][eIAB] inter-CU routing open issues (Huawei)

### 8.4.4 Other

Includes Duplexing enhancements RAN2 scope

## 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: 4 threads

### 8.5.1 Organizational

*Including email discussions [Post115-e][511][IIoT] and [Post115-e][512][IIoT]*

### 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 [Post115-e][513][IIoT]

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: 5 tdocs

Email max expectation: 5 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 [Post115-e][508][SDT] Stage-2 running CR update (Nokia), [Post115-e][506][SDT] RRC running CR update (ZTE), and [Post115-e][507][SDT] MAC running CR update (Huawei)

### 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) )

### 8.6.3 Control plane common aspects

NOTE: expected input:

Cosourced contributions for CCCH and DCCH solution for non-SDT data arrival indicaiton with acceptable proposals and draft CRs for the solutions for each solution,

Other CP open issues

### 8.6.4 Aspects specific to RACH based schemes

RA resource configuration and selection, RAN2 specific details of context fetch/data forwarding with and without anchor relocation. Note: common RACH aspects of signalling will be treated in 8.18

### 8.6.5 Aspects specific to CG based schemes

Including [Post114-e][508][SData] Open issues for CG-SDT (Qualcomm)

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.

CG resources, configuration and selection, validity of CG resources, multiple CG configurations, handling of beam selection for CG (including association between CGs and SSBs) etc.

## 8.7 NR Sidelink relay

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

Time budget: 2 TU

Tdoc Limitation: 7 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.

Including outcome of [Post115-e][610][Relay] Control plane procedures (InterDigital)

#### 8.7.2.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases. This agenda item will utilise a summary document.

#### 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 be treated on a time-available basis. This agenda item will utilise a summary document.

Including outcome of [Post115-e][604][Relay] Relay QoS (Apple)

### 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).

Including outcome of [Post115-e][611][Relay] Discovery shared/dedicated pool issue (Qualcomm)

#### 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 (note that email discussion outcome documents or rapporteur inputs do not count against Tdoc limitations)

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

Rapporteur input and running CRs

### 8.8.2 Cell reselection

Including discussion on how definition of "slice group" and how that can be defined and indicated to UE, e.g. do we adopt the same "slice group" definition for cell reselection and RACH?

Including discussion on whether additional mechanisms beyond solution 4 are needed

Including outcome of [Post115-e][244][Slicing] Resolving FFSs for solution 4 (Lenovo)

### 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)

Including outcome of [Post115-e][242][Slicing] Cell- vs. UE specific slice group signalling (Ericsson)

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.

### 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.

## 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. Incimong LS. Running CRs etc

### 8.9.2 Idle/inactive-mode UE power saving

Contributions input to 8.9.2.x.

Including outcome of [Post115-e][089][ePowSav] Paging Subgrouping (Xiaomi)

#### 8.9.2.1 Architecture

Further Aspects on responsibility split between nodes (and between WGs). Specific cases.

#### 8.9.2.2 Control and Procedure details

Further Aspects e.g. on How a UE determines which radio resource(s) to monitor for paging purposes, which configurations are used, etc. UE capabilities

### 8.9.3 Other aspects RAN2 impacts

e.g. TRS/CSI-RS for idle/inactive-mode UE

## 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: 5 tdocs

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.

Including outcome of:

[Post115-e][101][NTN] Stage 2 running CR (Thales)

[Post115-e][103][NTN] RRC running CR (Ericsson)

[Post115-e][104][NTN] MAC running CR (Interdigital)

[Post115-e][105][NTN] 38.304 running CR (ZTE)

### 8.10.2 User Plane

#### 8.10.2.1 RACH aspects

#### 8.10.2.2 Other MAC aspects

#### 8.10.2.3 RLC and PDCP aspects

### 8.10.3 Control Plane

#### 8.10.3.1General aspects

Including Earth fixed/moving beams related issues, TAC update and LCS aspects

#### 8.10.3.2 Idle/Inactive mode

Idle/inactive mode specific issues.

#### 8.10.3.3 Connected mode

Connected mode specific issues.

## 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. This agenda item will utilise a summary document.

Including outcome of [Post115-e][605][POS] Pre-configured assistance data (Intel)

### 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.

Including outcome of [Post115-e][608][POS] PRS configuration and measurement in RRC\_INACTIVE (vivo)

### 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. This agenda item will utilise a summary document.

Including outcome of [Post115-e][606][POS] MO-LR for on-demand PRS (CATT)

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination. This agenda item will utilise a summary document.

Including outcome of [Post115-e][607][POS] Integrity assistance data (Huawei)

### 8.11.6 A-GNSS enhancements

Including support of BDS B2a and B3I signals and support of NavIC.

### 8.11.7 Other

Input on other WI objectives.

## 8.12 Reduced Capability

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

Time budget: 1 TU

Tdoc Limitation: 4 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.

Including outcome of:

[Post115-e][106][RedCap] Running CRs (Ericsson)

[Post115-e][107][RedCap] Stage 2 Running CR (Nokia)

[Post115-e][108][RedCap] 38.306 Running CR (Intel)

[Post115-e][109][RedCap] MAC running CR (vivo)

### 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

#### 8.12.2.2 Identification, access and camping restrictions

Early identification of RedCap UEs (e.g. details of msg3 early identification). Common Aspects related to RACH partitioning (due to msg1 early identification) shall be submitted to 8.18.

System information indication for camping restrictions.

### 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.

#### 8.12.3.2 RRM relaxations

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

## 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

### 8.13.2 SON

#### 8.13.2.1 Handover related SON aspects

Including outcome of [Post115-e][899][SON/MDT] Handover related SON aspects (Ericsson)

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

Including outcome of [Post115-e][898][SON/MDT] 2-step RA related SON aspects (CATT)

#### 8.13.2.3 Other WID related SON features

Including outcome of [Post115-e][897][SON/MDT] 2 Modeling aspects related to information required by SN/SCG (Huawei)

### 8.13.3 MDT

#### 8.13.3.1 Immediate MDT enhancements

Including outcome of [Post115-e][895][SON/MDT] IMM MDT (ZTE)

#### 8.13.3.2 Logged MDT enhancements

Including outcome of [Post115-e][896][SON/MDT] Logged MDT (Nokia)

### 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: 2 threads

Focus on adressing open issues

### 8.14.1 Organizational

LS in. Rapporteur input. Running CRs.

### 8.14.2 QoE measurement collection NR standalone

Specify the support for QoE measurement collection in NR standalone mode. [RAN2, RAN3], including: configuration, activation, and deactivation procedures for both signalling-based and management-based QoE measurement collection and reporting, taking LTE QoE solutions as baseline, as defined in TR 38.890, Including determination of QoE measurement handling at RRC state transition/in RRC\_INACTIVE. including: support for multiple simultaneous QoE measurements at a UE, including: QoE measurement handling at RAN overload, including pause and resume of QoE measurement reporting.

Do not input to 8.14.2 but instead to 8.14.2.x

#### 8.14.2.1 Configuration architecture general aspects

#### 8.14.2.2 Start and Stop

Activation Deactivation Pause Resume. Note that the remaining discussion on Pause Resume may be deprioritized awaiting reply LS.

### 8.14.3 Other

Other WI objectives. UE capabilites.

## 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, [POST115-e][712], [POST115-e][713], etc.

### 8.15.2 SL DRX

Including [POST115-e][714], [POST115-e][715][V2X/SL], [POST115-e][716], 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: 3 tdocs

Email max expectation: 2-3 threads

### 8.16.1 Organizational

Rapporteur input, incoming LS etc. Running CRs.

### 8.16.2 Support SNPN with subscription or credentials by a separate entity

Including the broadcasting of information to enable SNPN selection for UEs with subscription/credentials owned by an entity separate from the SNPN and Including the associated cell selection/reselection and connected mode mobility support (with RAN3). Including parts that are common with onboarding.

### 8.16.3 Support UE onboarding and provisioning for NPN

Including the UE onboarding relevant parameter broadcast from SIB and The associated cell selection/reselection, cell access control and the connected mode mobility support

### 8.16.4 Other

Including support of IMS voice and emergency services for SNPN (Broadcasting of relevant parameters). UE capabilities

## 8.17 NR feMIMO

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

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.17.1 Organizational

Rapporteur input, incoming LS etc.

### 8.17.2 Support of Inter-Cell beam management

RAN2 impacts of inter-cell beam mgmt

### 8.17.3 Other

Other RAN2 impacts

## 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

### 8.18.1 Common signalling framework

Discussion on [Post115-e][504][RACH Partitioning] Signalling Aspects (Ericsson) and any other input for RRC signalling (focus company tdocs on issues that are not addressed in [504] email)

### 8.18.2 Common aspects of RACH procedure

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 that email discussion outcome documents or rapporteur inputs do not count against Tdoc limitations)

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

### 8.20.1 Organizational

Rapporteur input, incoming LS etc.

### 8.20.2 General

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

Including discussion on UE capabilities (based on information from RAN1/4, and e.g. field description changes for capabilities that differ between FR2-1 and FR2-2, text to use to to express FR2-x differentiation in the FR1/FR2-diff column of 38.306)

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

## 8.21 TEI17

Time budget: 1 TU

This Agenda item is for technical enhancements (of some importance) not covered elsewhere. Corrections to a R16 WI or a R15 WI, e.g. a normal correction to earlier release WI which is only proposed for R17 shall be submitted under the agenda item for the applicable R16 WI or R15 WI (but preferably later).

Note that TEI17 CRs may be agreed-in-principle for postponed final agreement when R17 TSes are to be created.

### 8.21.1 TEI proposals initiated by other groups

Including incoming LSes

### 8.21.2 TEI proposals initiated by RAN2

Tdoc Limitation: 2 tdocs for non-operators, no limit for operators (note that the limitation is counted towards the first company in the list for multi-sourced tdocs)

Note that proposals requires significant support and that the issue to resolved can be made clear. Proposals with low number of co-signers may deprioritized. TEI is not indended as a second chance for any earlier rejected proposal, so proposals that overlap with scope of an ongoing WI, or proposals that has earlier been rejected may be additionally scrutinized.

### 8.21.2.1 CP centric

Including outcome of [Post115-e][090][TEI17] Mobility-state-based cell reselection for NR High Speed railway Dedicated Network (CMCC).

### 8.21.2.2 UP centric

## 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: 2 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.

## 8.23 Uplink Data Compression (UDC)

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

Time budget: 0

Tdoc Limitation: 0 tdocs

No technical input is expected for RAN2 116-e, as this topic will not be treated. A long email discussion for next meeting may be done to prepare for progress. The scope of such discussion can be discussed in the organizational offline meeting thread 000.

## 8.24 NR R17 Other

Time budget: 2 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

## 9.1 NB-IoT and eMTC enhancements

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

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

### 9.1.1 Organizational

Including outcome of [Post115-e][304][NBIOT/eMTC R17] 36.300 running CR (Huawei)

Including outcome of [Post115-e][305][NBIOT/eMTC R17] 36.331 running CR (Qualcomm)

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

Including outcome of [Post115-e][301][NBIOT/eMTC R17] RLF measurements (Huawei)

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 [Post115-e][302] [NBIOT/eMTC R17] carrier selection (Ericsson)

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.

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,

### 9.2.2 Support of Non continuous coverage

### 9.2.3 User Plane Impact

Expect to converge on baseline UP agreements based on SI agreements and NR NTN progress.

### 9.2.4 Control Plane Impact

Expect to converge on baseline CP agreements based on SI agreements and NR NTN progress.

## 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

LTE-specific TEI17 documents can be submitted under this agenda item. New TEI17 proposals that are not sourced by at least two companies and two operators may be deprioritized.

Including outcome of [Post115-e][203][TEI17] Event triggered logged MDT for LTE (Qualcomm)

## 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)