3GPP TSG-RAN WG2 Meeting #115 electronic R2-2xxxxxx

Online, August, 2021

Source: RAN2 Chairman (MediaTek)

Title: Proposed Agenda

# 1 Opening of the meeting

## 1.1 Call for IPR

## 1.2 Network usage conditions

## 1.3 Other

# 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 92e

Breif RAN2 centric Report

0) RAN2 Status Report in RP-210931 received no comments.

1) RAN time plan in RP-211582 was endorsed. E.g. for RAN2 it means that the time period July 26-30 may be used for email discussions.

2) TU-plan was discussed and updated. Endorsed Multi-WG TU plan is now in RP-211604. RAN2 explicit TU allocation was added e.g. for Measurement gap enhancements WI (from Nov) and Coverage Enhancement WI (from Aug), In addition, R2 impacts of DSS was briefly discussed. RAN2 chair expects work on DSS R2 CRs can start in Q4 based on LS from RAN1.

3) Observation: There were a number of proposals for scope reduction for various R17 WIs that were not approved, with the comment that further scope reduction may be better done in 2021H2. There were proposals to further raise the bar for maintenance corrections that received significant support. RAN2 Chair: this reflects the current high load, and RAN2 work need to have sensible ambition level.

4) On Handling of TR 38.822

 Agreement: For R16, the TR 38.822 is kept updated

 Guidelines on updating the TR for Rel-16 features:

 1) For 38822, updates to RAN1 and RAN4 features shall be initiated in the respective group and communicated to RAN2 by LS (as today).

 2) For the RAN2 work: 38822 is updated following agreed changes to 38306, and received LSes with updates to RAN1 and RAN4 feature lists. CR for such updates are only initiated by the rapporteur. Any other CRs should be limited (up to RAN2 chair on how this is done) to not cause workload in RAN2.

5) Inclusive Language, Gino Mansini (Ericsson) is RAN point of contact for inclusive language issues. Discussion conclusions:

 1) Include ASN.1 names when updating specifications to use more inclusive language, as formulated in RP-211363.

 2) RAN WG Chairs should instruct specification Rapporteurs to include ASN.1 names in the ongoing inclusive language review.

 3) Communication to SA via LS.

 4) Ask for feedback from SA/CT in the LS, according to the conclusions in RP-210831.

 5) LS to SA and CT in RP-211519.

 6) NOTE: No consensus at this time to include Rel-16 specifications in the inclusive language review; status quo is kept

6) R17 SDT: On RRC-less solution:

 RAN2 is allowed to continue the work on the prioritized solution (i.e. the RRC-based solution

 for SDT) and RAN plenary to discuss the RRC-less solution as part of the Rel-17 WI scope discussion in RAN#93

7) R17 TxD: A New WID was approved for the work on UE RF requirements for Transparent Tx Diversity (TxD) for NR. R2 impact mainly UE cap. Approved WID: RP-211597, Handled for now under AI 8.22 R17 Other.

8) R17 feMimo: RAN2 scope was a major discussion point. It was decided to exclude enhancements to serving cell change. See updated WID in RP-211586

9) R17 NR up to 71GHz: The WID was revised, with e.g. the following Note: RAN2 is to prioritize protocol support of RAN1 design and not on optimizations on items not discussed in RAN1. Revised WID in RP-211584

10) R17 RedCap: The WID was revised with e.g. clarifications on RRM measurement relaxations. Revised WID in RP-211574

11) R17 IoT NTN: SI was closed, Official version approved of TR 36.763. WID was approved in RP-211601.

12) R17 eIAB: Rel-17 IAB to deprioritize discussions on ”DAPS-like” solutions for IAB.

13) R17 RF requirements enhancement for NR FR1 [RAN4 WI: NR\_RF\_FR1\_enh], on Band n77: (See RP-211587)

1. RAN4 focuses on the necessary updates to RAN4 requirements and leave signaling work, if any, to RAN2.

2. RAN2 focuses on signaling aspects, with an aim to ensure the network can properly deal with legacy n77 UEs that do not support 3.45-3.55 GHz operation in US

3. RAN tasks RAN4/2 to complete the required work in Aug. and report back to RAN#93-e

4. RAN4 chair is kindly asked to use an appropriate agenda to facilitate the work in Aug. meeting, i.e., R16 maintenance, R16 TEI, etc.

## 2.4 Others

Further instructions:

- For Maintenance, please consider essential corrections only, and please explain why your proposed correction is essential, e.g. whether it resolves an IOT/IODT issue.

- As usual tdoc limitations doesn’t apply to rapporteur documents, e.g. running CRs, 1 Misc CR per release per TS for the TS rapporteur, planning documents, reports from email/offline discussions, and documents created at meeting. Furthermore for incoming LSes, the contact company can submit one tdoc (e.g. draft reply, draft CR etc) that doesn’t count in tdoc limitation. Tdoc limitations count towards the company listed first for multi-source documents.

- Please submit CRs to the Agenda item of the corrected WI, regardless if the correction is proposed only for a later release.

- For R17, it is important to now converge on high level issues, to allow proper start/progress of TS work, and initiate discussions on all not yet started multi-WG issues. As observed during RP 92e, R17 non-converged parts may be subject to plenary prioritization discussions.

- For R17 WIs, if not already done, it is recommended to start the work on running CRs with significant contents.

# 3 Incoming liaisons

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

# 4 EUTRA corrections Rel-15 and earlier

See Appendix A for reference to Work items, work item codes and WIDs.

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. No web conference is planned for this agenda item.

## 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. Includes all R15 NR drops and architectures.

## 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

Including outcome of [Post114-e][070][NR15] Common Fields in Dedicated Signalling (Ericsson)

#### 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.)

#### 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

### 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. While high maintenance intensity is expected, Rel-16 corrections are treated separately per WI.

Tdoc Limitation: 25 tdocs in total for all sub agenda items, or the restriction for each sub-AI, whichever is more restrictive.

## 6.1 Common

NOTE that the merge of many WIs into a common R16 maintenance AI is new.

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

Including outcome of [Post114-e][071][NR16] CandidateBeamRSList set to release (MediaTek)

#### 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: 5 tdocs. See also 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: 6 tdocs, See also 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: 5 tdocs. See also 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

## 7.1 EUTRA Rel-16 General

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

Purely editorial 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.

### 7.2.1 General and Stage-2 corrections

Including incoming LSs

### 7.2.2 Connection to 5GC corrections

Connection to 5GC for MTC and NB-IoT is treated jointly under this AI.

### 7.2.3 Other corrections

Including corrections related to Mobile-terminated early data transmission (MT-EDT), Scheduling multiple DL/UL transport blocks, Quality report in Msg3, MPDCCH performance improvement using CRS, Improvements for non-BL UEs, Stand-alone deployment, Mobility enhancements, coexistence with NR and MTC specific topics. Corrections related to mobile-terminated early data transmission, scheduling multiple DL/UL transport blocks and coexistence with NR are treated jointly for MTC and NB-IoT under this AI.

## 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.

### 7.3.1 General and Stage-2 Corrections

Including incoming LSs etc

### 7.3.2 UE-group wake-up signal (WUS) Corrections

UE group wake Up signal for MTC and NB-IoT is treated jointly under this Agenda Item.

### 7.3.3 Transmission in preconfigured resources corrections

Transmission in preconfigured resources for MTC and NB-IoT is treated jointly under this Agenda Item.

### 7.3.4 Other NB-IoT Specific corrections

NB-IoT specific topics

## 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 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

## 8.1 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.
including the outcome of [Post114-e][074][MBS] RRC running CR (Huawei)

### 8.1.2 L2 Centric

#### 8.1.2.1 Multicast Service Continuity

Includes Mobility and PTM PTP switch, e.g. whether to have a PDCP SR with a new trigger, PDCP functionality for PTMPTP switch and for mobility procedures. Can also include related CP enablers and assupmtions, those directly applicable. Activationdeactivation PTMPTP.
Including the outcome of [Post114-e][072][MBS] Delivery Mode 1 PTM PTP operation (OPPO).

#### 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. Further discussion on, e.g. wether there is a need for PTM deactivation.

#### 8.1.2.3 Other

E.g. Initialization of RLC and PDCP windows.

### 8.1.3 L3 Centric

#### 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.
Including the ourcome of [Post114-e][073][MBS] Service continuity for Delivery Mode 2 (Xiaomi)

#### 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.

## 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: 4 tdocs

Email max expectation: 4 threads

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

### 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 outcome of [Post114-e][231][R17 DCCA] SCG activation/deactivation options (Huawei)

Including UE assistance information for SCG deactivation

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

Including discussion on how/whether RRM/RLM/BFD measurements are done for deactivated SCG

Including discussion on TAT timer handling for deactivated SCG

Including discussion on RRM/CSI/BM measurement reporting for deactivated SCG

#### 8.2.2.3 Activation of deactivated SCG

Including outcome of [Post114-e][231][R17 DCCA] SCG activation/deactivation options (Huawei)

Including discussion on SCG activation details: For network-initiated activation, when is random access used ? Is usage of random access UE or network decision?

How can UE request SCG activation?

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

This agenda item will not be treated 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 CPAC configuration and execution details and Stage-2 signalling flows.

Including discussion on the design of inter-node messages (to answer RAN3 LS questions).

Including discussion on whether, after T-SN provided the conditional configurations to the MN, the SN measurement configuration can be updated \*before\* the MN provides theses conditional configurations to the UE.

Including discussion whether the execution conditions can be updated after T-SN provided the conditional configurations to the MN.

#### 8.2.3.2 CPAC procedures from UE perspective

Including discussion on UE measurements for CPAC purposes.

Including discussion on signalling towards UE.

Including outcome of [Post114-e][233][R17 DCCA] Uu Message design for CPAC (CATT)

#### 8.2.3.3 Other CPAC aspects

This agenda item will be deprioritized in this meeting.

Including discussion on CPAC failure handling.

Including discussion on CPAC co-existence with CHO.

### 8.2.4 Temporary RS for SCell activation

This agenda item will be deprioritized in this meeting unless urgent LS from RAN1 or RAN4 is received.

## 8.3 Multi SIM

(LTE\_NR\_MUSIM-Core; leading WG: RAN2; REL-17; WID: RP-210316)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 3-4 threads

### 8.3.1 Organizational, Requirements and Scope

Including LSs and any rapporteur input.

### 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 whether RAN2 decision on NAS-based busy indication can be retained (cv. SA2 LS [S2-2105150](https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_145E_Electronic_2021-05/Docs/S2-2105150.zip))

Including discussion on "configured time" for AS-based solution.

Including interaction between AS-based solution and NAS-based solution for network switching

Including outcome of [Post114-e][242][MUSIM] Switching message details (vivo)

Including outcome of [Post114-e][243][MUSIM] Gap handling (ZTE)

### 8.3.4 Paging with service indication

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

## 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

### 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

From previous meeting(s), there are many proposals on the table. All proposals has significant opposition. It seems clear that the ambition level for this objective need to be limited but at the same time almost nothing has been agreed. Intention at this meeting to attempt to agree on ONE (or possibly two) further solution(s). Companies are asked to input in order to facilitate such decision, i.e. asked to explain preference, and explain non-acceptable options.

### 8.4.3 Topology adaptation enhancements

Including the outcome of [Post114-e][075][eIAB] Open Issues on Re-routing (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

Rapporteur input including [Post114-e][509][URLLC/IIoT] Running Stage 2 CR review (Nokia)

### 8.5.2 Enhancements for support of time synchronization

Including email discussion [Post114-e][512][URLLC/IIoT] T-synch open issues (Intel)

RAN1 progress if any should be taken into account. 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 email discussions.

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

Including [Post114-e][510][URLLC/IIoT] Open issues for UCE

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 email discussions.

### 8.5.4 RAN enhancements based on new QoS

Including [Post114-e][511][URLLC/IIoT] QoS Solutions (Samsung)

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

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-210870)

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 [Post114-e][504][SData] Running Stage 2 CR review (Nokia), [Post114-e][505][SData] RRC/MAC modeling and RRC running CR (ZTE), and [Post114-e][506][SData] Running MAC CR (Huawei)

### 8.6.2 User plane common aspects

Overall user plane procedure for SDT (including triggering and thresholds, HARQ, and MAC CEs), data volume computation,. suppression of PDCP status report, RSRP threshold for SDT selection, switching between CG/RA

### 8.6.3 Control plane common aspects

NOTE: expected input: paper containing the remaining proposals not discussed as part of [Post113-e][503] from rapporteur to be treated.

Focus contributions on FFS and topics that are not relying on inputs from RAN3/SA3/CT1

Cell reselection and failure handling, handling of subsequent data transmissins (including, how to indicate presence of subsequent data, etc) handling of non-SDT DRBs (including whether to resume or not non-SDT), CP data over SDT, SDT termination and data loss prevention

Including [Post114-e][507][SData] Non-SDT data arrival handling (Intel)

### 8.6.4 Aspects specific to RACH based schemes

RA resource configuration and selection, PDCCH monitoring after successful SDT RA completion, RAN2 specific details of context fetch/data forwarding with and without anchor relocation

### 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-211050)

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.

The LS from SA2 in R2-2106967 (S2-2104932) that addresses a mix of sidelink relay and sidelink enhancement topics will initially be handled under this AI.

### 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 [Post114-e][605][Relay] SI and paging forwarding (vivo)

#### 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.

### 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 Relay discovery

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-211289)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.8.1 Organizational

Rapporteur input and running CRs

### 8.8.2 Cell reselection

Including discussion on whether SA2 proposal on band-specific slices in cell reselection has impacts on the RAN (cv. SA2 LS [S2-2105158](https://www.3gpp.org/ftp/tsg_sa/WG2_Arch/TSGS2_145E_Electronic_2021-05/Docs/S2-2105158.zip))

Including outcome of [Post114-e][251][Slicing] Solution direction details for slice priorities in cell reselection (Lenovo)

Including discussion on how "slice group" can be defined and indicated to UE

As 1st priority, including details of slice availability in terms of Slice grouping and frequency priority information for broadcast and RRC Release message, usage of “intended slice” (FFS whether we use this term in specification), UE prioritisation of slice when there is more than one intended slice and how UE determines frequency priority for inter-frequency cell reselection based on these.

As 2nd priority, including details of slice based reselection for MO, different RSRP/RSRQ thresholds for inter and intra-frequency slice based cell reselection, need for Validity area in RRC Release

### 8.8.3 RACH

Including outcome of [Post114-e][252][Slicing] RACH partitioning details for slicing (CMCC)

Including discussion slice specific CBRA RACH for IDLE and INACTIVE mode. Slice-specific CBRA RACH for CONNECTED mode is deprioritized and will not be treated in this meeting.

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.

## 8.9 UE Power Saving

(NR\_UE\_pow\_sav\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210938)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

### 8.9.1 Organizational

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

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

Including the outcome of [Post114-e][076][ePowSav] Paging SubGrouping (CATT). Note that only the email discussion can be input to 8.9.2, other contributions input 8.9.2.x.

#### 8.9.2.1 Architecture

Further Aspects on responsibility split between nodes (and between WGs). Specific cases, E.g. for paging enhancement by grouping: how to handle non-supporting UE, non-supporting CN, non-supporting gNB, the case when CN doesn’t use UE subgrouping.

#### 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.

### 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.

### 8.10.2 User Plane

#### 8.10.2.1 RACH aspects

#### 8.10.2.2 Other MAC aspects

The discussion will focus on possible different behaviours per UL HARQ process, including possible LCP restrictions.

#### 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.

### 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 [Post114-e][602][POS] Stage 2 procedure for deferred MT-LR in RRC\_INACTIVE (Qualcomm)

### 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 [Post114-e][603][POS] Procedures and signalling for on-demand PRS (Ericsson)

### 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 [Post114-e][601][POS] GNSS integrity assistance information, KPIs, and reporting of integrity results (Swift)

### 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.

### 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 the outcome of [POST114-e][105][RedCap] Capabilities (Intel)

#### 8.12.2.2 Identification, access and camping restrictions

Early identification of RedCap UEs (e.g. need for/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-basedstationarity 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 the outcome of [Post114-e][850][SON/MDT] Modeling of CHO and DAPS related RLF reports (Ericsson)

Including the outcome of [Post114-e][851][SON/MDT] Procedures and Modeling of successful HO report (Huawei)

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

#### 8.13.2.3 Other WID related SON features

Including the outcome of [Post114-e][852][SON/MDT] Modeling aspects related to information required by SN/SCG (CATT)

### 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: 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.

## 8.15 NR Sidelink enhancements

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

Time budget: 1.5 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 6 threads

The LS from SA2 in R2-2106967 (S2-2104932) that addresses a mix of sidelink relay and sidelink enhancement topics will initially be handled under the NR SL relay AI.

### 8.15.1 Organizational

Including incoming LSs, rapporteur inputs, etc.

### 8.15.2 SL DRX

Including [Post114-e][704], [Post114-e][705], and [Post114-e][706].

### 8.15.3 Resource allocation enhancements RAN2 scope

### 8.15.4 Other

## 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).

## 8.17 NR feMIMO

(NR\_feMIMO-Core; leading WG: RAN1; REL-17; WID: RP-211586)

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: 1 tdocs

Expected to cover WIs SDT, CovEnh, RedCap, RAN slicing .. Initial discussion on what should be treated in common and what design could be common.

## 8.19 Coverage Enhancements

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

Time budget: 0.5

Tdoc Limitation: 1 tdocs

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-211584)

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

Rapporteur input, incoming LS etc.

### 8.20.2 General

RAN2 impact tech proposals.

## 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

### 8.21.2.2 UP centric

## 8.22 NR R17 Other

Time budget: 1.6 TU (also R1 misc and R4: NR\_RF\_TxD-Core)

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.

# 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

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

Focus on:

Details of the criteria and configuration for starting measurements

Whether any further information needs to be provided by the NW

Whether any assistance information from UE is needed.

If/how to support “early” RLF

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

Focus on details of the remaining 2 sub-options and selection of one of the options:

For option 1, whether DRX can be part of the carrier selection criteria

For option 1, upon cell change, whether to fallback or to select carrier based on previously determined CEL

For both options whether there is a report from the UE to suggest a carrier or provide a metric report

For both options whether to use a hysteresis/longer averaging/timer on measured NRSRP

### 9.1.4 Other

Includes WI objectives led by other WGs.

Includes resubmission of R2-2106603 Report of [AT114-e][302][NBIOT/eMTC R17] NB-IoT/eMTC Other (ZTE), ZTE

## 9.2 NB-IoT and eMTC support for NTN

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

Time budget: 1TU

Tdoc Limitation: 4 tdocs.

Email max expectation: 5 threads

### 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.

#### 9.2.4.1 TA and Mobility related

#### 9.2.4.2 Other

## 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: 1 thread

TEI17 documents can be submitted under this agenda item

## 9.4 NR and EUTRA Inclusive language

Time budget: N/A

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. Meanwhile this AI can be used to cover missing part, if any, and for correction/modification of the endorsed/agreed-in-principle CRs e.g. for inter-group consistency, inter-group review etc. There may be a consistency review activity organized at R2#115-e, where the rapporteurs of impacted TSes are expected to participate (TBD). RAN coordinator for inclusive language is Gino Mansini (Ericsson).