3GPP TSG-RAN WG2 Meeting #113 bis electronic R2-2xxxxxx
Online, April 12 – April 20, 2021

Source: RAN2 Chairman (Mediatek)
Title: Agenda

General

This meeting is electronic and 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.

Specific methodology

This meeting is conducted by email, ftp and by on-line web conferences by GoToWebinar + Torhu, in three parallel sessions.

R16 raising the bar

For Rel-16 there should now be smaller and smaller efforts spent on text enhancements. Only essential corrections should be agreed. To still allow some text enhancements, pre-coordination is requested (see below).

Tdoc Limitation

Tdoc Limitation limits the number of allowed input tdocs for a company as indicated for an Agenda Item for all types of documents. A multi-sourced document is counted towards the limit of the first company. Rapporteur input (email discussion, WI rapporteur, TS rapporteur, assigned CR editor, assigned summary rapporteur etc) and at-meeting decided tdocs, revisions etc, do not count towards a tdoc limitation. For an LS to RAN2 with action, the contact company is allowed one document that doesn’t count towards the tdoc limitation.

There are tdoc limitations for NR Rel-17 and NR Rel-16. Each document is counted, so it is recommended to not have both a CR and a discussion tdoc (e.g. skip the discussion doc). It is also possible to attach draft CRs as appendix to a discussion doc.

Note that tdoc limitation is applied after tdocs have been re-allocated to the correct Agenda Item, and companies exceeding the limit will be asked to withdraw tdocs to conform.

Rel-16 text enhancements and miscellaneous corrections CRs

Rapporteurs are asked to, if needed, be ready to prepare (at the meeting) a miscellaneous corrections CR for their WI/TS. Companies shall coordinate with the Rapporteur for small changes, clarifications, text enhancements etc. The Rapporteur is asked to develop an opinion on the need for the particular change. Text enhancements (no behavioural change) with no support from the Rapporteur might not be treated.

In this context the Rapporteur for a TS for a WI = Editor of the Rel-16 WI Cat B CRs (or the TS rapporteur, or other person assigned by the session chair when applicable).

**Availability of baseline TS**

This meeting is very close to the RP meeting. In case the baseline TS cannot be available in time, either a Draft version will be made available to serve as baseline for CRs (e.g. for RRC), or CRs for a certain TS will be postponed (more detailed instructions will follow).

# 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

## 2.4 Others

# 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.

NOTE: FOR R2#113bis-e it is expected that ~30% of the input tdocs under this AI will be selected for initial postponement to the next meeting.

## 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

This Agenda item will be handled in a break-out session.

### 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.)

#### 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 related to NR

Including outcome of email discussion [Post113-e][008][NR15] 4-layer MIMO in EN-DC for Cat5 UEs (Nokia).

### 5.4.3 UE capabilities

Including outcome of email discussion [Post113-e][051][NR15] DL scheduling slot offset (Ericsson)

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

NOTE: FOR R2#113bis-e it is expected that ~30% of the input tdocs under this AI will be selected for initial postponement to the next meeting.

## 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)

(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).

## 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

This Agenda item will be handled in a break-out session.

### 6.1.3.1 MAC

Including outcome of email discussion [Post113-e][052][NR16] cgRetxTimer (Qualcomm).

### 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

### 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 (5.4.1.x)

## 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

Including [POST113-e][706][V2X/SL]. This agenda item may utilize a summary document on RRC (Huawei).

### 6.2.3 User plane corrections

Including [POST113-e][705][V2X/SL], [POST113-e][707][V2X/SL] and [POST113-e][708][V2X/SL]. 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: 7 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 NR and LTE mobility enhancements

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

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

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

No documents should be submitted to 6.4. Please submit to 6.4.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.

Tdoc Limitation: 8 tdocs, See also tdoc limitation for Agenda Item 6

### 6.4.1 CHO/CPC Corrections

Including incoming LSs related to CHO/CPC (if any).

This AI addresses NR CPC and corrections to NR/LTE CHO (i.e. both NR and LTE-specific corrections for CHO should be submitted here).

Including corrections to control and user plane specifications (e.g. 3x.331, 3x.323, 3x.321) for CHO and CPC.

### 6.4.2 DAPS handover Corrections

Including incoming LSs related to DAPS handover (if any).

This AI jointly addresses corrections to NR and LTE DAPS (i.e. both NR and LTE corrections for DAPS should be submitted here).

Including corrections to LTE/NR control and user plane specifications (e.g. 3x.331, 3x.323, 3x.321) for DAPS HO.

### 6.4.3 Other corrections

Including incoming LSs related to LTE/NR mobility capabilities (if any). Corrections related to CHO/CPC/DAPS inter-operability with other features should be submitted to 6.1.4.3.

Including corrections to UE capability aspects of LTE/NR mobility WI (i.e. corrections to 3x.331 and 3x.306).

## 6.5 DC and CA enhancements

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

No documents should be submitted to 6.5. Please submit to 6.5.x

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.Tdoc Limitation: 8 tdocs, See also tdoc limitation for Agenda Item 6

### 6.5.1 Corrections to Fast Scell activation and Early measurement reporting

Including corrections to TS38.331, 36.331, 38.306, 36.306 and 38.321 related to Fast SCell activation and Early measurement reporting.

### 6.5.2 Other DCCA corrections

Including corrections to NR-NR DC, MCG SCell and SCG configuration with RRC resume, Fast MCG link recovery on all specifications.

Including outcome of [Post113-e][224][DCCA] TCI state indication at direct SCell activation (MediaTek)

## 6.6 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: 7 tdocs. See also tdoc limitation for Agenda Item 6

### 6.6.1 General and stage-2 corrections

Including incoming LSs, TS 37.320 corrections

### 6.6.2 TS 38.314 corrections

### 6.6.3 RRC corrections

Including outcome of email discussion [Post113-e][850][NR16 SON/MDT] Timestamp of event triggered MDT (Ericsson)

# 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

### 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\_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)

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.

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

Including outcome of [Post113-e][206][LTE] Clarification to Fallback band combination definition (Nokia)

## 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: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 4-6 threads

### 8.1.1 Organizational, Requirements, Scope and Architecture

Including stage-2 proposals.

### 8.1.2 Connected mode UEs

#### 8.1.2.1 Reliability

Treatment of this topic during R2-113bis-e will be limited. 1 tdoc is invited in order to increase the understanding of potential impacts on somewhat more detailed level: i.e. fundamental ARQ mechanisms for PTM: ACK-based / NACK-based / Window progression, Trigger of and contents of status report (on a high level). Objective to achieve better understanding of the likely impact of the three options for PTM L2 reliability identified at previous meeting (RLC AM, PDCP retx, PDCP switch to PTP + possible retx at switch).

#### 8.1.2.2 Dynamic PTM PTP switch and service continuity

Including PTP PTM switch for the agreed RLC-UM configurations and PTP PTM switch at mobility.

Including outcome of email discussion [Post113-e][054][MBS17] PTP/PTM dynamic switch and MRB type change (Ericsson)

#### 8.1.2.3 Mobility and Service continuity

Aspects beyond PTP PTM switch at mobility. NOT TREATED during R2 113-bis-e. No input is expected.

#### 8.1.2.4 Other

Including e.g. RAN2 aspects of group scheduling.

### 8.1.3 Idle and Inactive mode UEs

Including outcome of email discussion [Post113-e][053][MBS17] MCCH scheduling and MCCH change notification (Huawei)

## 8.2 MR DC/CA further enhancements

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

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 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).

Including outcome of [Post113-e][233][eDCCA] Running Stage-2 CR on eDCCA (Huawei)

### 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

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

Including discussion on how MN/SN request for SCG deactivation works and whether the request can be rejected.

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

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

Including discussion on what UE does when the SCG is deactivated: Does UE do RRM/RLM measurements when the SCG is deactivated? If RLM is used, what is UE behaviour if SCG RLF occurs? How does UE handle TAT when SCG is deactivated? Does UE need to perform L1 measurement (as configured by CSI-MeasConfig) and/or beam monitoring (as configured by RadioLinkMonitoringConfig) when the SCG is deactivated, and is associated reporting needed?

#### 8.2.2.3 Activation of deactivated SCG

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

Including discussion on SCG activation details: How does MN/SN/UE request SCG activation and can the request be rejected? Is usage of random access at SCG activation UE or network decision?

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

This agenda item will be deprioritized during 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 and signalling flows

This agenda item will be deprioritized in this meeting. The email discussion will be treated.

Including outcome of [Post113-e][234][eDCCA] CPAC procedures (CATT)

Including discussion on CPAC configuration and execution details.

Including discussion on signalling flows for Stage-2 specification.

#### 8.2.3.2 CPAC coexistence with CHO and CPAC failure handling

This agenda item will not be treated in this meeting.

Including discussion on CPAC failure handling and co-existence with CHO

#### 8.2.3.3 Other CPAC aspects

This agenda item will not be treated in this meeting.

## 8.3 Multi SIM

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

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

### 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 enhancement(s) to address the collision due to reception of paging when the UE is in IDLE/INACTIVE mode in both the networks associated with respective SIMs [RAN2]

Inclduing discussion on RAN2 impacts of the paging collision solution (e.g. whether UE assistance information is needed, whether of solution 1+2b or solution 1+3 is supported for NR, etc.)

Including discussion on whether RAN2 can make the UE behaviour predictable for paging collision avoidance

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

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

Including discussion on mechanism for UE to notify Network A of its switch from Network A (for MUSIM purpose)

Including details of signalling from UE to network for the network switching for MUSIM purpose.

### 8.3.4 Paging with service indication

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

Including discussions on mechanism for an incoming page to indicate to the UE whether the service is voLTE/VoNR (pending SA2 feedback).

This agenda item will not be treated in this meeting (unless urgent SA2 request is received).

## 8.4 NR IAB enhancements

(NR\_IAB\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210758)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 3-4 threads

### 8.4.1 Organizational Requirements and Scope

Including work plan and any other rapporteur input.

### 8.4.2 Enhancements to improve topology-wide fairness multi-hop latency and congestion mitigation

This meeting Focus on solutions for the agreed issues.

### 8.4.3 Topology adaptation enhancements

Include solutions for the agreed issues.

Including outcome of email discussion [Post113-e][057][IAB17] CHO and DAPS for IAB (CATT)

Including outcome of email discussion [Post113-e][058][IAB17] Inter-donor topology adaptation (Qualcomm)

### 8.4.4 Duplexing enhancements RAN2 scope

This AI will be deprioritized during this meeting.

## 8.5 NR IIoT URLLC

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

Time budget: 0 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 0 threads

THIS FEATURE WILL NOT BE TREATED in 113bis-e online and offline (i.e. no in-meeting email discussions). However, two post-meeting email discussions to get company views will be triggered for 8.5.3 and 8.5.4 (see below)

### 8.5.1 Organizational

Rapporteur input

No input expected

### 8.5.2 Enhancements for support of time synchronization

Including requirements and scope.

No input expected

This AI will not be treated in 113bis-e and no email discussion will be triggered on this topic during or post April meeting.

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

RAN2 aspects related to URLLC in unlicensed controlled environments. Initial discussion on potential impacts, including requirements and scope

This AI will NOT be treated in 113bis-e and NO in meeting email discussions will be triggered.

Contributions on this topic can be submitted, but is not required, and a post April meeting email discussion is expected to be triggered to get company inputs on the remaining open issues.

### 8.5.4 RAN enhancements based on new QoS

RAN enhancements based on new QoS related parameters if any, e.g. survival time, burst spread, decided in SA2. [RAN2, RAN3]

This AI will NOT be treated in 113bis-e and NO in meeting email discussions will be triggered.

Contributions on this topic can be submitted taking into account SA2 progress, but is not required, and a post April meeting email discussion is expected to be triggered to get company inputs on the remaining open issues.

## 8.6 Small Data enhancements

(NR\_SmallData\_INACTIVE-Core; leading WG: RAN2; REL-17; WID: RP-210870)

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

FFS whether RACH partitioning should be initially done as a common design for multiple WIs: RAN slicing, RedCap, Small Data Transmission, CovEnh? Or whether coordination should be attempted once each WI has produced CRs.

### 8.6.1 Organizational

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

Including [Post113-e][501][502][503][504]

### 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, and any other user aspects included in Post113-e][501][503] which cannot be concluded as part of the email

Email discussion summary expected for this AI durin 113bis-e

### 8.6.3 Control plane common aspects

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 and any other control plane aspects included in [Post113-e][501][502][503] which cannot be concluded as part of the email

### 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

This AI will not be treated in RAN2#113bis-e (only the email discussion [504] in AI 8.6.1 will be treated)

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, any other aspects included in [Post113-e][504][SDT] which cannot be concluded as part of the email

## 8.7 NR Sidelink relay SI

(NR\_XYZ\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210904)

Time budget: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 4-5 threads

Focus for this meeting: Progress the common topics on relay discovery and re/selection (including identification of the potential AS re/selection criteria other than signal strength), and understand dependencies on other groups.

### 8.7.1 Organizational

TS updates, rapporteur inputs. Documents in this AI do not count towards the tdoc limitation.

### 8.7.2 Relay discovery

Re-using LTE discovery as baseline.

### 8.7.3 Relay re/selection

Re-using LTE re/selection as baseline. Including potential AS criteria for re/selection.

### 8.7.4 L2 relay specific topics

No documents should be submitted to 8.7.4. Please submit to 8.7.4.x.

#### 8.7.4.1 Control plane procedures

Including connection management, SI delivery, paging, access control for remote UE. Connection management topics will be prioritised.

#### 8.7.4.2 Protocol architecture

Including protocol stack aspects and functions of the adaptation layer. This AI will be treated on a time-available basis, prioritising any topics that may require coordination with other groups.

## 8.8 RAN slicing

(NR\_XYZ\_enh-Core; leading WG: RAN2; REL-17; WID: RP-210912)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.8.1 Organizational

Rapporteur input

### 8.8.2 Cell reselection

To assist cell reselection, broadcast the supported slice info of the current cell and neighbour cells, and cell reselection priority per slice in system information message. To assist cell reselection, include slice info (with similar information as in SI message) in RRCRelease message. Take into account SA2 progress / coordinate with SA2 when/if applicable.

### 8.8.3 RACH

Configuration of separated PRACH configuration (e.g., transmission occasions of time-frequency domain and preambles) for slice or slice group. RACH parameters prioritization (e.g., scalingFactorBI and powerRampingStepHighPriority) for slice or slice group. Determine how this works with existing functionality. FFS whether RACH partitioning should be initially done as a common design for multiple WIs: RAN slicing, RedCap, Small Data Transmission, CovEnh? Or whether coordination should be attempted once each WI has produced CRs.

## 8.9 UE Power Saving

(NR\_UE\_pow\_sav\_enh-Core; leading WG: RAN2; REL-17; WID: RP-200938)

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

### 8.9.1 Organizational Scope and Requirements

E.g. Rapporteur input

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

ATTEMPT TO DECIDE ON PAGING GROUPING AT THIS MEETING, TO UNDERSTAND IMPACT IN OTHER GROUPS RAN1, SA2 etc

### 8.9.3 Other aspects RAN2 impacts

## 8.10 NR Non-Terrestrial Networks (NTN)

(NR\_NTN\_solutions-Core; leading WG: RAN2; REL-17; WID: RP-210908)

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

Including the outcome of [POST113-e][106][NTN] MAC aspects (Huawei). No company inputs expected on aspects covered by [POST113-e][106]

#### 8.10.2.2 Other MAC aspects

No company inputs expected on aspects covered by [POST113-e][106]

#### 8.10.2.3 RLC and PDCP aspects

No company inputs expected for this agenda item. Only the outcome of [POST113-e][107][NTN] RLC and PDCP aspects (Samsung) will be treated.

### 8.10.3 Control Plane

#### 8.10.3.1 Earth fixed/moving beams related issues

Including TAC update aspects

#### 8.10.3.2 Idle/Inactive mode

Idle/inactive mode specific issues.

Including cell selection/reselection & system information.

This agenda item maybe deprioritized during this meeting.

#### 8.10.3.3 Connected mode

Connected mode specific issues.

Including the outcome of [POST113-e][108][NTN] SMTC and measurement gaps (Intel). No company inputs expected on aspects covered by [POST113-e][108]

#### 8.10.3.4 LCS aspects

Potential issues associated to the use of the existing Location Services (LCS) application protocols to locate UE in the context of NTN.

 Only reply LSs from other groups, if any, are expected to be handled at this meeting. Company inputs (in response to possible reply LSs) are still possible.

## 8.11 NR positioning enhancements

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

Time budget: 1.5 TU

Tdoc Limitation: 5 tdocs

Email max expectation: 5-6 threads

Support for BDS B2a, BDS B3I signal and support for NavIC to NR is postponed to a later meeting. Input on this is not expected. Further instructions may be added to this version.

### 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 of signalling, and procedures for improving positioning latency of the Rel-16 NR positioning methods, for DL and DL+UL positioning methods.

### 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.

### 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

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination

### 8.11.6 Other

Input on other WI objectives.

## 8.12 Reduced Capability

(NR\_redcap-Core; leading WG: RAN1; REL-17; WID: RP-210918)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2-3 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

This agenda item (incl sub-agenda items) will not be treated during this meeting and no company inputs are expected

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

#### 8.12.2.2 Identification, access and camping restrictions

FFS whether RACH partitioning should be initially done as a common design for multiple WIs: RAN slicing, RedCap, Small Data Transmission, CovEnh? Or whether coordination should be attempted once each WI has produced CRs.

### 8.12.3 UE power saving and battery lifetime enhancement

#### 8.12.3.1 eDRX cycles

Specification of extended DRX enhancements for RRC Inactive and Idle, according to the WI objectives

#### 8.12.3.2 RRM relaxations

Investigation of RRM measurement relaxation criteria for neighbouring cells, according to the WI objectives

## 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 conditional handover and DAPS

Including outcome of email discussion [Post113-e][851][NR17 SON/MDT] HO related SON changes (Ericsson)

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

Including outcome of email discussion [Post113-e][852][NR17 SON/MDT] 2 step RA and other SON changes (CATT)

#### 8.13.2.3 Other WID related SON features

Including RAN3 input features, successful handover report, MRO for SN change failure, RACH optimization enhancements, UL-DL coverage mismatch, …

### 8.13.3 MDT

#### 8.13.3.1 Immediate MDT enhancements

including M5/M6/M7 in all bearer type scenarios, immediate MDT for MR-DC

Including outcome of email discussion [Post113-e][853][NR17 SON/MDT] IMM MDT (Huawei)

#### 8.13.3.2 Logged MDT enhancements

Including outcome of email discussion [Post113-e][854][NR17 SON/MDT] Logged MDT (CMCC)

### 8.13.4 L2 Measurements

## 8.14 NR QoE

(NR\_XYZ\_enh-Core; leading WG: RAN3; REL-17; WID: RP-210913)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.14.1 Organizational

LS in. Rapporteur input.

### 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 8.12.2 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

### 8.14.3 Other

Other WI objectives. The WI objectives tagged [RAN3, RAN2] in the WID will not be treated at this meeting, no input is expected for this sub Agenda Item.

## 8.15 NR Sidelink enhancements

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

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

### 8.15.1 Organizational

Including incoming LSs, rapporteur inputs, etc.

### 8.15.2 SL DRX

Including [POST113-e][703][V2X/SL] and [POST113-e][704][V2X/SL].

### 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: 2 tdocs

Email max expectation: 2-3 threads

### 8.16.1 Organizational

Rapporteur input, incoming LS etc.

### 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)

### 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), however THIS part will not be treated at this meeting, and no input is expected.

## 8.17 NR R17 Other

Time budget: 1 TU

LS in for R17 items not in a specific R2 Agenda Item.

NOTE that R2 initiated TEI17 will not be treated until 2021Q3 and no input is expected.

LS from RAN1 on Mobility for feMIMO will be opened, discussed further in a Post Meeting email discussion. Goal to have a reply LS from next meeting.

In general incoming LSes may/will be treated.

# 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-201306)

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

Including Summary of AI 9.1.2 (TBD).

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

Including outcome of [Post113-e][351][NBIOT/eMTC R17] Paging carrier selection (Huawei).

Including Summary of AI 9.1.3 (TBD).

### 9.1.4 Other

Includes WI objectives led by other WGs.

Including Summary of AI 9.1.4 (TBD).

## 9.2 SI on NB-IoT and eMTC support for NTN

(FS\_LTE\_NBIOT\_eMTC\_NTN; leading WG: RAN1; REL-17; SID: RP-210868)

Time budget: 0.5TU

Tdoc Limitation: 2 tdocs + 1 on determination of essential parts (RP-210915).

Email max expectation: 2 threads

Guidance from RP-210915: The study on IoT over NTN should target the following by RAN#92: Detailed study of solutions addressing essential functionality for GEO and NGSO scenarios, prioritizing at least the use case of intermittent delay-tolerant small packet transmissions, Prioritization of potential enhancements for the functionalities needed specifically for IoT over NTN that cannot be translated from the ongoing NR NTN WI for the considered scenarios and use case(s) in the study. Recommendations on specification changes needed at least for essential functionality (to be determined by working groups targeting Rel-17), for the considered scenarios and use case(s)

### 9.2.1 Organizational scenarios and scope

Rapporteur Input, incoming LSes, RAN2 aspects of identifying scenarios. Determination of essential parts acc to RP-210915..

### 9.2.2 User Plane

THIS AI will not be treated at this meeting. No input is expected.

Including necessary changes to support NB-IoT and eMTC over satellite, reusing as much as possible the conclusions of the studies performed for NR NTN in TR38.821, related to HARQ operation, and related to timers (e.g. SR, DRX, etc.)

### 9.2.3 Mobility and Tracking Area

Including necessary changes to support NB-IoT and eMTC over satellite, reusing as much as possible the conclusions of the studies performed for NR NTN in TR38.821. RAN2 aspects related to idle mode and connected mode mobility: RLF-based for NB-IoT, Handover-based for eMTC.

An AI summary may be utilized for this AI (Mediatek).

### 9.2.4 Other

Including e.g. System information enhancements. Performance evaluations.

Including outcome of email discussion [Post113-e][055][IoT NTN] Performance Evaluation (Ericsson)

## 9.3 EUTRA R17 Other

Time budget: 0 TU

Tdoc Limitation: X tdocs

Email max expectation: X threads

Including discussion on RAN2 actions for user location tracking attack based on GSMA LS [R2-2100003](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_113-e/Docs/R2-2100003.zip).

No TEI17 documents will be handled in this meeting.

## 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.