**Email discussions after RAN2#106**

# Guidelines for email discussions:

**For 1 or 2 week email discussions:**

1. Aim to have the final version of the agreed documents provided by the rapporteur at or shortly after the deadline.
2. Please **provide comments on the first version of the document at least 24 hours before the deadline**. This allows the rapporteur to make an update addressing all companies' comments and there still be time for a quick round of comments on the update.
3. If you have provided comments in the discussion then **please indicate to the rapporteur if you are ok with the update provided** (can be via reflector or a direct email). This avoids the rapporteur having to wait before they can conclude that their update is acceptable to you.
4. **Rapporteurs, please request your tdoc number from Juha when you initiate your email discussion and then provide the final version as soon as you are confident that it is agreeable. You do not need to wait for a reminder from me or Juha before sending the final version.**
5. Rapporteurs, please let me know if there are problems in the discussion where I may be able to help. I will anyway be watching the discussions but a flag is sometimes useful.
6. To avoid any confusion, Juha or I will send an email to confirm the final status of the document.

**For emails discussion to the next meeting:**

1. Rapporteurs, feel free to set an intermediate deadline for companies to provide initial comments, so that the conclusions and proposals can be prepared and distributed before the final deadline.
2. Please respect any intermediate deadline indicated by the rapporteur, and preferably provide your feedback as soon as possible.

# One week discussions: Deadline Thursday, 2019-05-23, 23:59 Pacific Time (unless stated)

**Please request TDoc numbers for the following email discussions from MCC if not already allocated below**

[106#01][NR/late drop] Beam reporting for SCG serving and neighbour cells (Huawei)

Intended outcome: Draft CR agreed to be merged to late drop CR

Deadline: Wednesday 2019-05-22

[106#02][NR/RDCU] Capture agreements on MDT (CMCC)

Intended outcome: Agreed TP

Deadline: Tuesday 2019-05-21

[106#03][NR/RDCU] Capture agreements on L1/2 measurements (Huawei)

Intended outcome: Agreed TP

Deadline: Tuesday 2019-05-21

[106#04][NR/late drop] NR-DC specific UE capabilities inside the band combination (DOCOMO)

Intended outcome: Draft CR agreed to be merged to late drop CR

Deadline: Thursday 2019-05-23

[106#05][NR] FD-MIMO related UE capability changes for EN-DC (Qualcomm)

To address 1.1 from the RAN1 LS R2-1908429

Intended outcome: Agreed CRs to 36.331, 36.306, 38.306 (as required)

Deadline: Thursday 2019-05-23

[106#06][NR] PUCCH reconfiguration on NR UL and SUL (Huawei)

Intended outcome: Agreed CR (or could go into rapporteur CR if agreed to be very minor clarification)

Deadline: Thursday 2019-05-23

[106#07][NR] New NR band for LTE/NR spectrum sharing (Ericsson)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#08][NR] Access barring check for RRC Connected (Nokia)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#09][NR] Need codes CR (Intel)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#10][NR] Miscellaneous rapporteur CR (Ericsson)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#11][NR] commonSearchSpaceList in PDCCH-ConfigCommon (Nokia)

Address delta signalling of commonSearchSpaceList in PDCCH-ConfigCommon

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#12][NR] FGI for ANR (Qualcomm)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#13][NR] Inter-RAT Handover (Intel)

Finalise the discussion of fullConfig and inter-RAT handover and conclude the 2 CRs to 36.331 and 38.331

Intended outcome: Agreed CRs

Deadline: Thursday 2019-05-23

[106#14][NR] Handover from NR to EUTRAN (CATT)

Email discussion is to allow companies more time to check if the change is acceptable, and update the coversheet to ensure it is a good reflection of the situation.

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#15][NR] UE feature list TR (DOCOMO)

Conclude the TR with the latest input from RAN1 and RAN4

Intended outcome: Agreed TR v1.0.0 for submission to RAN for approval

Deadline: Thursday 2019-05-23

[106#16][NR] maxUplinkDutyCycle (CMCC)

Implement what RAN4 have told us (do not rediscuss the RAN4 CR)

Check whether the capability is per UE or per band, update coversheet, check final details

Intended outcome: Agreed CRs to 38.331 and 38.306

Deadline: Thursday 2019-05-23

[106#17][NR] UE Capability CR (Ericsson)

Check R2-1908357. Also address the clash with CR in R2-1906105

Intended outcome: Agreed CRs

Deadline: Thursday 2019-05-23

[106#18][NR] pdsch-ProcessingType2 (Huawei)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#19][NR/late drop] 38.331 CR (Ericsson)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-28

[106#20][NR/late drop] 36.331 CR (Samsung)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#21][LTE/5GC] Capture NR agreements in eLTE (Intel)

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#22][R14 NB-IoT] CRs for Clarification of configured carrier (Qualcomm)

Intended outcome: Agreed CRs in R2-1908198 and R2-1908183.

Deadline: Thursday 2019-05-23

[106#23][R15 NB-IoT] SI update notification and access barring in NB-IoT (Ericsson)

Discuss wording and whether CR is early implementable, adding table etc. if so.

Intended outcome: Agreed CR in R2-1908199

Deadline: Thursday 2019-05-23

[106#24][R15 NB-IoT] Correction to Minimum Length of DL and UL HARQ RTT Timer (DoCoMo)

Editorial updates and check changes are finally OK.

Intended outcome: Agreed CR in R2-1908265

Deadline: Thursday 2019-05-23

[106#25][R16 NB-IoT/eMTC] Update RAN2 agreements for Rel-16 additional enhancements for NB-IoT and MTC (Blackberry)

Intended outcome: endorsed report in R2-1908188

Deadline: Thursday 2019-05-23

[106#26][NR/Power saving] TP Capturing RAN2 agreements and recommendations (CATT)

Intended outcome: Agreed TP

Deadline: Thursday 2019-05-23

[106#27][NR] DC reporting for SUL (Spreadtrum)

A response LS (R1-1907949/R2-1908484) relating to the postponed CR R2-1905696 has now been received so the CR can be concluded based on the RAN1 feedback

Intended outcome: Agreed CR

Deadline: Thursday 2019-05-23

[106#85][NR] Incoming LS from RAN1 on UE capabilities (DOCOMO)

Review specification impacts of RAN1 LS in R1-1907954/R2-1908485 to determine what action, if any, RAN2 could take before RAN#84. The conclusion may be to defer the CRs to Q3.

Impacts to the new TR can be considered directly within email discussion #15

Intended outcome: Agreed CRs (if required)

Deadline: Thursday 2019-05-23

[106#86][NR] UE Capability - possible update to agreed RAN2 CR R2-1908382 (Intel)

Discuss the issue on supportedBandwidthCombinationSet raised by Ericsson, and update the CR in R2-1908382 if necessary

Intended outcome: Agreed CR (if concluded necessary otherwise R2-1908382 remains agreed)

Deadline: Monday 2019-05-27

[106#87][LTE/euCA] Possible revision of RAN2 agreed CR R2-1908406 (Spreadtrum)

Conclude whether RAN2 agreed CR R2-1908406 should be revised to remove the first change (further discussion of this change would then be postponed to the next meeting).

Intended outcome: Agreed CR (if concluded necessary otherwise R2-1908405 remains agreed)

Deadline: Tuesday 2019-05-28

# Three week discussions: Deadline Thursday, 2019-06-06, 23:59 Pacific Time (unless stated)

**Please request TDoc numbers for the following email discussions from MCC if not already allocated below**

[106#28][NR] LS on supported BW for initial BWP (Nokia)

Intended outcome: Approved LS

Deadline: Thursday 2019-06-06

[106#29][IAB] Stage-2 Running CR (Qualcomm)

Intended outcome: agreed draft CR capturing agreements from R2#106

Deadline: Thursday 2019-06-06]

[106#30][NR-U] Stage-2 Running CR (Qualcomm)

Intended outcome: Endorsed draft CR, Inclusion of agreements this meeting

Deadline: Thursday 2019-06-06

[106#31][IIOT] Stage-2 Running CR (Nokia)

Intended outcome: Endorsed Draft CR, capture meeting agreements

Deadline: Thursday 2019-06-06

[106#32][NR/V2X] Running CR (LG)

Revise running CR to be endorsed (R2-1908299, LG)

Intended outcome: Endorsed running CR

Deadline: Thursday 2019-06-06

# Next meeting discussions: Deadline Thursday, 2019-08-08, 23:59 Pacific Time (unless stated)

**TDoc numbers for the following email discussions may be requested via 3GU tool**

[106#33][NR/late drop] Inter-node signalling related to selectedBandEntriesMN (Huawei)

Intended outcome: Report and agreeable CR to next meeting

Deadline: Thursday 2019-08-08

[106#34][NR/RACS] UE capability ID in relation to filters (MediaTek)

Confirm understanding of the SA2 status with regarding the number of UE capability IDs that can be transferred to the network (1 or more than 1)

Progress the discussion on the relation of UE capability ID and filters considering 2 cases:

1/ The UE capability ID is only carried via NAS

2/ The UE capability ID is also transferred by the RRC UE Cap Enquiry message

Discussion should also progress common understanding of the signalling flows between UE, RAN and CN for the different approaches.

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#35][NR/DCCA] Validity area (Vivo)

- Whether it is needed or not

- What is the content of the validity area

- If configured, how does it affect UE idle measurement performing behaviour

o What happens if the UE reselects to a cell that is not part of the validity area (for any of the configured frequencies/cells) while measIdleDuration is running

o What happens if the UE reselects back to a cell that is part of the validity area while measIdleDuration is running

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#36][NR/DCCA] Measurement and reporting configuration (Qualcomm)

- What SIB(s) are used for idle mode meas configuration

- If CSI-RS configuration is needed or not

- Whether the network can configure max number of beams and a threshold above which beams are reported

- Whether some other measurement related configuration in SI (e.g. smtc) outside of the early measurement configuration can still be used.

- Whether the network can provide information on support of CA/DC between frequencies to assist the UE to determine which frequencies to provide measurement for.

- How to prevent outdated measurement reporting

- Any other scenarios where the UE removes/releases idle measurement configurations and/or results

Intended outcome:

Deadline: Thursday 2019-08-08

[106#37][NR/DCCA] UE behaviour regarding idle measurement configurations and measurement results (Ericsson)

- during state transitions, inter-RAT cell re-selection, etc, while measIdleDuration is running

o 2 step resume/release

o Inter-RAT cell re-selection

o RRC rejection

o autonomous transition to IDLE mode (e.g. reception of CN paging while in INACTIVE)

o successful transition to CONNECTED mode

o transition to IDLE/INACTIVE mode

- when measIdleDuration expires or stops

- clarifications regarding when the UE starts/stops/suspends/resumes idle measurements

Intended outcome:

Deadline: Thursday 2019-08-08

[106#38][NR/DCCA] SCG and MCG SCell Configuration with RRC Resume (Ericsson)

Progress the discussion of maintaining SCG and MCG SCell Configuration in RRC Resume and providing an SCG and MCG SCell configuration in RRC Resume for both LTE and NR. The discussion should aim to understand potential benefits.

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#39][NR/CLI] Measurement object and event triggers (LG)

1/ Progress the discussion of whether CLI measurement resources are added to the existing MO or a new MO is defined

2/ Progress the discussion of the event triggers for CLI measurement reporting

3/ Also including the associated configuration parameters for the reporting config.

Intended outcome: Report to the next meeting

Deadline: Thursday 2019-08-08

[106#40][NR/Mob enh] Beam specific aspects of CHO (Qualcomm)

Intended outcome: Reporting to next meeting

Deadline: Thursday 2019-08-08

[106#41][NR/LTE/mob enh] CHO execution details (Vivo)

UE actions related to CHO execution

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#42][NR/LTE/mob enh] CHO configuration (OPPO)

How to define the CHO configuration, how to update the configuration, how to configure the execution condition

Intended outcome: Report to the next meeting

Deadline: Thursday 2019-08-08

[106#43][IAB] Backhaul RLF (CATT)

Intended outcome: Report, paving the way for on-line agreements

Deadline: Thursday 2019-08-08

[106#44][IAB] Flow Control (ZTE)

Intended outcome: Report, paving the way for on-line agreements

Deadline: Thursday 2019-08-08

[106#45][IAB] Lossless behaviour (Huawei)

Intended outcome: Report, paving the way for on-line agreements

Deadline: Thursday 2019-08-08

[106#46][IAB] Low-latency scheduling (Samsung)

Intended outcome: Report, paving the way for on-line agreements

Deadline: Thursday 2019-08-08

[106#47][IAB] Bearer Mapping (LG)

Intended outcome: Report, UP bearer mapping on intermediate nodes, CP bearer mapping (in general)

Deadline: Thursday 2019-08-08

[106#48][IAB] BAP Modelling (Intel)

Intended outcome: Model(s) applicable for Control / configuration and for protocol operation

Deadline: Thursday 2019-08-08

[106#49][NR-U] Consistent LBT Failures (Qualcomm)

Intended outcome: Report, Identify the options on the table, for recovery actions, and detection of consistent LBT failure.

Deadline: Thursday 2019-08-08

[106#50][NR-U] CAPC (Nokia)

Intended outcome: Report, Populate the CAPC table, taking into account proposals to R2#106.

Deadline: Thursday 2019-08-08

[106#51][NR-U] Configured Grant (LG)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#52][NR-U] DRX (Huawei)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#53][IIOT] Handling of overlapping PUSCH grant prioritization (Docomo)

Intended outcome: Report, scope according to R2-1908444

Deadline: Thursday 2019-08-08

[106#54][IIOT] Need for and details of UE-based mechanisms for PDCP duplication (CMCC)

Intended outcome: Report, scope according to R2-1908444

Deadline: Thursday 2019-08-08

[106#55][IIOT] Network control of PDCP duplication enhancements (Ericsson)

Intended outcome: Report, scope according to R2-1908444

Deadline: Thursday 2019-08-08

[106#56][IIOT] SR vs PUSCH prioritization (QC)

Intended outcome: Report, pave the way for agreements taking into account input to R2#106

Deadline: Thursday 2019-08-08

[106#57][NB-IoT] Running CR on 36.300 (Huawei)

Intended outcome: Running CR to the next meeting.

Deadline: Thursday 2019-08-08

[106#58][NB-IoT] Running CR on 36.331 (Huawei)

Intended outcome: Running CR to the next meeting.

Deadline: Thursday 2019-08-08

[106#59][R16 NB-IoT/eMTC] D-PUR Procedural steps (Huawei)

Scope: Procedural steps on D-PUR

- Before D-PUR transmission (not configuration contents).

- D-PUR transmission (e.g. how and what can be multiplexed)

- After D-PUR transmission (Monitoring, retransmission, fallback cases)

- Any impacts on CN.

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#60][R16 NB-IoT/eMTC] D-PUR TA validation criteria (Ericsson)

Scope: RAN2 impacts for TA validation criteria

- Relation between criteria.

- What/How to configure.

- Procedure upon TA validation failure.

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#61][R16 NB-IoT/eMTC] D-PUR Request, (re)configuration and release mechanism (Qualcomm)

Scope: D-PUR Request, (re)configuration and release mechanism

- Which steps/procedures/messages are used for D-PUR request.

- Which other information is needed in D-PUR request.

- Whether/How to confirm/reject D-PUR configuration.

- Release mechanism for D-PUR for different cases.

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#62][R16 NB-IoT] ANR procedure, configuration and report details (Huawei)

Intended outcome: Report with TP

Deadline: Thursday 2019-08-08

[106#63][R16 NB-IoT] Discussion of signalling aspects for inter-RAT cell selection assistance. (Nokia)

Intended outcome: Stage 3 TP for running CR.

Deadline: Thursday 2019-08-08

[106#64][R16 NB-IoT/eMTC] UP MT-EDT (Ericsson)

- identify the issues in Msg2 and Msg4 based solutions

- primary scope is to identify issues, but solutions can also be discussed.

- primary scope is to differentiate Msg2 vs. Msg4 based solution based on identified issues.

- discussion on which solution(s) to specify in Rel-16

Intended outcome: Report to the next meeting

Deadline: Thursday 2019-08-08

[106#65][R16 NB-IoT/eMTC] CP MT-EDT (Intel)

- identify the issues in Msg2 and Msg4 based solutions

- primary scope is to identify issues, but solutions can also be discussed.

- primary scope is to differentiate Msg2 vs. Msg4 based solution based on identified issues.

- discussion on which solution(s) to specify in Rel-16

Intended outcome: Report to the next meeting

Deadline: Thursday 2019-08-08

[106#66][R16 eMTC] Quality report in Msg3 (Huawei)

Discussion on:

- how to enable the feature for quality report in idle and connected mode

- how to trigger signalling to provide the quality report in connected mode

- which signalling is used to provide the quality report in connected mode

- if capability is needed for idle and connected mode.

Intended outcome: Report to the next meeting

Deadline: Thursday 2019-08-08

[106#67][R16 eMTC] How to acquire ETWS/CMAS information (LG)

Discussion on how to acquire ETWS/CMAS information after receiving notification in connected mode

Intended outcome: Report to the next meeting

Deadline: Thursday 2019-08-08

[106#68][R16 eMTC] Running CR on 36.300 (Intel)

Intended outcome: Running CR to the next meeting.

Deadline: Thursday 2019-08-08

[106#69][R16 eMTC] Running CR on 36.331 (Qualcomm)

Intended outcome: Running CR to the next meeting.

Deadline: Thursday 2019-08-08

[106#70][NR/NTN] RACH capacity/procedures ( ZTE )

Intended outcome: TP capturing capacity and possible solutions to be included in the TR

Deadline: June 28/2019

[106#71][NR/NTN] HARQ (Nomor)

- Discuss criteria for enabling/disabling of HARQ feedback and how it is done.

Intended outcome: TP capturing agreements from RAN2#106 and solutions discussed in email discussion

Deadline: June 28, 2019

[106#72][NR/NTN] TP on NTN-TN service continuity (Nokia)

Intended outcome: TP capturing the issues and solutions

Deadline: Thursday 2019-08-08

[106#73][NR/NTN ] Mobility issues and solutions (InterDigital )

- Capture and discuss the mobility issues

- Capture and discuss the solutions proposed in RAN2 contributions so far

Intended outcome: TP capturing issues and possible solutions

Deadline: Thursday 2019-08-08

[106#74][NR/NTN ] Cell Selection/reselection (LG)

- Phase 1: Capture issues and scenarios (e.g. moving beams within the same network) we want to focus on related to cell selection

- Phase 2: Capture and discuss the solutions proposed in RAN2 contributions so far

Intended outcome: TP capturing issues and solutions

Deadline: June 28, 2019

[106#75][NR/2 step RACH] 38.300 Running CR (ZTE)

Intended outcome: Running CR for 38.300

Deadline: Thursday 2019-08-08

[106#76][NR/Positioning] SSR grid definition (u-blox)

Converge on the requirements and solutions for the grid definition.

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#77][NR/V2X] Prioritisation (OPPO)

Discuss details of P7 and other prioritization issues proposed in other contributions (e.g. between MAC CEs, SRs, etc.) (OPPO)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#78][NR/V2X] Cell reselection (CATT)

Discuss detailed prioritization rules in cell reselection according to the above agreement (CATT)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#79][NR/V2X] TX resource pool (MediaTek)

Discuss on the need of other use cases where exceptional TX resource pool is required. It also includes the need of additional enhancement (e.g. using configured grant at HO case). (MediaTek)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#80][NR/V2X] BSR and SR (Huawei)

Discuss remaining issues for BSR and SR (including not only from R2-1907450 but also others). Note HARQ retransmission aspect is not scope (Huawei)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#81][NR/V2X] SLRB (ZTE)

Identify the detailed parameters i) SLRB parameters which are related to both TX and RX and need to be aligned between UEs ii) SLRB parameters which are related to TX only iii) SLRB parameters which are related to RX only, and discuss further FFS points (ZTE)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#82][NR/V2X] RLC (Ericsson)

RLC PDU format, how to initialize RLC parameters, any functional difference compared to NR Uu, How RLC AM works, etc. (Ericsson)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#83][NR/V2X] PDCP (Vivo)

PDCP PDU format, how to initialize PDCP parameters, any functional difference compared to NR Uu, etc. (Vivo)

Intended outcome: Report to next meeting

Deadline: Thursday 2019-08-08

[106#84][LTE/feMOB] Stage-2 CR for LTE mobility enhancements (China Telecom)

Capture updates based on this meeting’s agreements.

Intended outcome: Running CR for 36.300 submitted to next meeting

Deadline: Thursday 2018-08-08