3GPP TSG-RAN WG2 Meeting #119 electronic DRAFT\_R2-2208707

Online, August, 2022

Source: Session chair (Huawei)

Title: Report from MBS breakout session

Agenda Item: 9.7

# Email discussions

* [AT119-e][600] Organizational - MBS session

Scope:

* + - Share plans and list of ongoing email discussions for MBS sessions
		- Share meetings notes and agreements for review and endorsement
* [AT119-e][601][MBS-R17] RRC corrections (Huawei)

Phase 1 scope: Gather comments on the RRC corrections summary

Phase 1 outcome: Updated RRC corrections summary:

* List of ‘easy’ proposals for agreement
* List of proposals that require online discussions
* List of proposals for further offline discussion

Deadline (Phase 1): Thursday 2022-08-18 0800 UTC, updated summary to be uploaded latest 1215 UTC

* [AT119-e][602][MBS-R17] CP other corrections (Mediatek)

Phase 1 scope: Gather comments on the Other CP corrections summary

Phase 1 outcome: Updated Other CP corrections summary:

* List of ‘easy’ proposals for agreement
* List of proposals that require online discussions
* List of proposals for further offline discussion

Deadline (Phase 1): Thursday 2022-08-18 0800 UTC, updated summary to be uploaded latest 1215 UTC

* [AT119-e][603][MBS-R17] UP corrections (Lenovo)

Phase 1 scope: Gather comments on the UP corrections summary

Phase 1 outcome: Updated Other CP corrections summary:

* List of ‘easy’ proposals for agreement
* List of proposals that require online discussions
* List of proposals for further offline discussion

Deadline (Phase 1): Thursday 2022-08-18 0800 UTC, updated summary to be uploaded latest 1215 UTC

## 2.4 Instructions

Tdoc limitations (reminder)

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

- Assigned summary rapporteur input of the summary.

- Email / offline discussions outcomes by discussion rapporteur,

- WI rapporteurs input for WI planning etc,

- TS rapporteur input for TS maintenance

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

- Contact Company of a LSin that triggers RAN2 action may submit one tdoc to facilitate the LS reply. This only applies to one of the contact companies in case there are several (default the first).

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

Tdoc limitations doesn’t apply to shadow / mirror CRs (Cat A).

Tdoc limitations applies to all other submitted tdocs.

Rel-18

For R2 119-e, no offline decision making for Rel-18, only online decisions. Any exception to this must be pre-agreed.

Rel-17 CR

General, all correction CRs / draft CRs:

1. Rapporteurs of Rel-17 WI CRs are asked to continue their volunteer responsibility, even if the WI is closed, at least for the durations of R2 119-e (later meetings TBD).
2. Unless otherwise explicitly agreed/indicated, max one Cat F CR per TS per WI shall be produced as outcome of the meeting. Exception: NBC aspects, if any, may need to be in a separate CR per WI (decided case by case). Note that Impact analysis is required per CR.
3. For smaller / editorial corrections, Companies are asked to coordinate directly with Rapporteurs of Rel-17 WI CRs, rather than submitting separate correction tdocs.
4. General: Please refer to TS contents, in order to illustrate issues and wanted corrections. Proposals that are vague and unspecific may be deprioritized / not treated.

Rel-17 UE capabilities

For R2 119-e, the intention is to finalize UE capabilities for Rel-17

There is no specific coordination for EUTRA UE capabilities.

For NR UE capabilities the following applies:

1: As previously, work on mega CRs (one mega CR for TS 38.306 and one for TS 38.331). This work is done under Agenda Item AI 6.0.2

2: Coordinate centrally incorporation in CRs of RAN1 / RAN4 features for all Rel17 WIs. This work is done under Agenda Item AI 6.0.2 and changes are done directly to the mega CRs. There could be exceptions, case by case, where RAN1 / RAN4 features are treated under a WI-specific Agenda Item instead.

3: RAN2 should only implement in the CRs the features / feature groups from the RAN1 and RAN4 feature list without any FFS that impacts ASN.1 (no highlighted yellow, [] and/or marked as FFS/TBD). Also UE Capabilities that are dependent on such FFS features should not be implemented.

4: R2 Features and capabilities developed only in R2, are developed and corrected individually per WI, under WI-specific Agenda Items. Draft CRs (running CRs) for 38.331 and 38.306 are produced. The 306 CRs shall include an annex containing the RAN2 determined UE capabilities in the feature list format (similar to annex containing RAN2 agreements) for easy compilation into the TR38.822 in the later stage.

5. At the end of R2 119-e, endorsed WI specific UE capability CRs will be merged into the mega CRs, and the mega CRs will be provided to TSG RAN. Any exception to this need to be decided case by case.

R2-2206902 RAN2 Handbook 08-22 MCC discussion Late

# 6 NR Rel-17

## 6.1 NR Multicast

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

Tdoc Limitation: 5 tdocs

It is encouraged to contribute with draft CRs or provide TP(s) for the affected specifications in the Annex of the contribution to facilitate the inclusion in the rapporteur CR.

### 6.1.1 Organizational and Stage-2

LS ins. CR Rapporteurs baseline correction CRs. For smaller corrections, text clarifications etc please contact CR Rapporteur before/instead of submitting a separate Tdoc.

Impact to stage-2 TS, and discussions on system level issues that need resolution, if any.

*LSins*

R2-2206910 Reply LS on HARQ process for MCCH and Broadcast MTCH(s) (R1-2205215; contact: BBC) RAN1 LS in Rel-17 NR\_MBS To:RAN2

R2-2206912 LS on TCI indication in multicast DCI (R1-2205369; contact: CMCC) RAN1 LS in Rel-17 NR\_MBS To:RAN2

R2-2206977 Reply LS on the MBS broadcast service continuity and MBS session identification (S4-220827; contact: Qualcomm) SA4 LS in Rel-17 NR\_MBS-Core, 5MBP3 To:RAN2 Cc:RAN3, SA2

R2-2207038 Response to SA4 LS for MBS user service parameters Samsung discussion Rel-17

R2-2208635 Discussion about SA4 LS on USD content with draft LS back ZTE, Sanechips discussion Rel-17 NR\_MBS-Core

*Rapporteur correction CRs*

*To be endorsed as a baseline*

R2-2207590 Rapporteur corrections on RRC Huawei, CATT, HiSilicon CR Rel-17 38.331 17.1.0 3289 - F NR\_MBS-Core

R2-2207813 Miscellaneous corrections for MBS 38.323 Xiaomi CR Rel-17 38.323 17.1.0 0098 - F NR\_MBS-Core

R2-2208437 Corrections on MBS CMCC, Huaiwei CR Rel-17 38.300 17.1.0 0540 - F NR\_MBS-Core

R2-2207036 38.304 Corrections for MBS CATT, Nokia, Huawei, HiSilicon, CBN CR Rel-17 38.304 17.1.0 0256 - F NR\_MBS-Core

*(moved from 6.1.3)*

*Stage-2 corrections*

R2-2207031 Miscellaneous corrections to TS 38.300 on NR MBS CATT CR Rel-17 38.300 17.1.0 0493 - F NR\_MBS-Core

R2-2207222 Correction on MBS Interest Indication vivo CR Rel-17 38.300 17.1.0 0503 - F NR\_MBS-Core

R2-2207223 Correction on Layer 2 Architecture for Broadcast vivo CR Rel-17 38.300 17.1.0 0504 - F NR\_MBS-Core

R2-2208086 Clarification of group paging Ericsson discussion Rel-17 NR\_MBS-Core

R2-2208181 Stage2 corrections for NR MBS Nokia, Nokia Shanghai Bell CR Rel-17 38.300 17.1.0 0530 - F NR\_MBS-Core

*To be confirmed*

* [AT119-e][604][MBS-R17] Stage-2 corrections and CR (CMCC)

Scope: Treat Stage-2 corrections from 6.1.1

Outcome: Report (if needed), 38.300 MBS corrections CR

Deadline: Agreeable CR available EOM, intermediate deadlines set by the rapporteur

### 6.1.2 RRC corrections

*For online treatment*

R2-2208871 Summary of A.I. 6.1.2 / RRC corrections (Huawei) Huawei, HiSilicon

 *To be confirmed*

* [AT119-e][601][MBS-R17] RRC corrections (Huawei)

Phase 2 scope: Resolve remaining RRC issues

Phase 2 outcome: Report, 38.331 MBS corrections CR

Deadline (Phase 2): Report available: 2022-08-24 1200 UTC, agreeable CR: EOM

*Papers below treated as part of [AT119-e][601]*

R2-2207032 Corrections related to MBS Interest Indication CATT CR Rel-17 38.331 17.1.0 3208 - F NR\_MBS-Core

R2-2207033 Corrections on Broadcast Configuration CATT, CBN CR Rel-17 38.331 17.1.0 3209 - F NR\_MBS-Core

R2-2207034 Corrections on multicast MRB handling CATT CR Rel-17 38.331 17.1.0 3210 - F NR\_MBS-Core

R2-2207035 Miscellaneous Corrections to TS 38.331 CATT CR Rel-17 38.331 17.1.0 3211 - F NR\_MBS-Core

R2-2207039 RRC Corrections for MBS Samsung discussion Rel-17 38.331

R2-2207225 Clarification on LCH Reassociation vivo discussion Rel-17 NR\_MBS-Core

R2-2207555 TMGI handling Nokia, Nokia Shanghai Bell CR Rel-17 38.331 17.1.0 3287 - F NR\_MBS-Core

R2-2207591 Clarfication on the early configuration of MBS broadcast search space Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

R2-2207592 Discussion on decoding of the TMGI in MII Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

R2-2208084 Broadcast sessions with the same MRB configuration Ericsson discussion Rel-17 NR\_MBS-Core

*(moved from 6.1.3)*

R2-2208088 MII signalling when SIB21 is absent Ericsson discussion Rel-17 NR\_MBS-Core

R2-2208095 Multicast-specific PUCCH-Config when multicast feedback is not configured with a priority value Qualcomm Incorporated CR Rel-17 38.331 17.1.0 3354 - F NR\_MBS-Core

R2-2208589 Counter Check Procedure for Multicast Samsung discussion Rel-17 NR\_MBS-Core

R2-2208639 Miscellaneous CR to TS 38.331 on NR MBS ZTE, Sanechips CR Rel-17 38.331 17.1.0 3457 - F NR\_MBS-Core

### 6.1.3 Other CP corrections

Including corrections to TS 38.304, features / UE caps developed in RAN2 (complementary to AI 6.0.2).

*For online treatment*

R2-2208872 Summary of Rel-17 MBS 6.1.3 Other CP corrections MediaTek Inc.

 *To be confirmed*

* [AT119-e][602][MBS-R17] CP other corrections (Mediatek)

Phase 2 scope: Resolve remaining Other CP issues

Phase 2 outcome: Report

Deadline (Phase 2): Report available: 2022-08-24 1200 UTC

*Papers below treated as part of [AT119-e][602]*

R2-2207224 Clarification on Group Paging for Inactive UE vivo discussion Rel-17 NR\_MBS-Core

R2-2207554 MBS prioritization with slice based reselection Nokia, Nokia Shanghai Bell CR Rel-17 38.304 17.1.0 0264 - F NR\_MBS-Core

*(moved from 6.1.2)*

R2-2207562 Discussion on the maximum G-RNTI for MBS MediaTek inc. discussion Rel-17 NR\_MBS-Core

R2-2207563 Discussion and correction on UE capabilities for MBS MediaTek inc. discussion Rel-17 NR\_MBS-Core

R2-2207564 Corrections on the maximum G-RNTI for MBS MediaTek inc. draftCR Rel-17 38.331 17.1.0 F NR\_MBS-Core

R2-2207811 Simultaneous PDSCH processing capability for MBS Xiaomi discussion Rel-17 NR\_MBS-Core R2-2206114

R2-2207814 Correction on the G-RNTI and G-CS-RNTI configuration Xiaomi draftCR Rel-17 38.331 17.1.0 F NR\_MBS-Core

R2-2208085 Clarification of frequency prioritization for MBS broadcast Ericsson discussion Rel-17 NR\_MBS-Core

R2-2208087 MBS and RedCap Ericsson discussion Rel-17 NR\_MBS-Core

R2-2208500 Remaining MBS UE capability open issues Intel Corporation discussion Rel-17 NR\_MBS-Core

R2-2208636 On supported max number of G-RNTI for MBS broadcast ZTE, Sanechips discussion Rel-17 NR\_MBS-Core

### 6.1.4 MAC corrections

*For online treatment*

R2-2208873 Summary of A.I. 6.1.4 and 6.1.5 / UP corrections (Lenovo) Lenovo

*To be confirmed*

* [AT119-e][603][MBS-R17] UP corrections (Lenovo)

Phase 2 scope: resolve remaining UP corrections summary

Phase 2 outcome: Report

Deadline (Phase 2): Report available: 2022-08-24 1200 UTC

*Papers below treated as part of [AT119-e][603]*

R2-2207046 MAC Corrections for MBS Samsung discussion Rel-17 38.321

R2-2207226 Clarification on pdsch-AggregationFactor in NR MBS vivo CR Rel-17 38.321 17.1.0 1310 - F NR\_MBS-Core

R2-2207470 38.321 CR Correction on the HARQ buffer flush for the MBS broadcast Beijing Xiaomi Software Tech draftCR Rel-17 38.321 17.1.0 F NR\_MBS-Core

R2-2207593 Clarification on retransmission and RTT timer maintenance Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

R2-2207594 Further consideration on inactivity timers for unicast and multicast Huawei, HiSilicon discussion Rel-17 NR\_MBS-Core

R2-2207812 HARQ process for MCCH and Broadcast MTCH(s) Xiaomi draftCR Rel-17 38.321 17.1.0 F NR\_MBS-Core

R2-2208637 Miscellaneous CR to TS 38.321 on NR MBS ZTE, Sanechips CR Rel-17 38.321 17.1.0 1395 - F NR\_MBS-Core

### 6.1.5 Other UP Corrections

Including corrections to PDCP, RLC and SDAP.

*Papers below treated as part of [AT119-e][603]*

R2-2207370 PDCP related corrections for MBS Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

R2-2207565 PDCP corrections for MBS MediaTek inc. discussion Rel-17 NR\_MBS-Core

R2-2207595 PDCP state variables handling during multicast MRB suspend Huawei, Xiaomi, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

R2-2207692 Misalignment between RRC and PDCP specs regarding multicastHFN-AndRefSN Lenovo discussion Rel-17

R2-2208590 Correction for Initial value of RX\_DELIV for Multicast Samsung discussion Rel-17 NR\_MBS-Core

R2-2208638 Miscellaneous CR to TS 38.323 on NR MBS ZTE, Sanechips CR Rel-17 38.323 17.1.0 0099 - F NR\_MBS-Core

# 8 Rel-18

## 8.11 Enhancements of NR Multicast and Broadcast Services

(NR\_MBS\_enh-Core; leading WG: RAN2; REL-18; WID: RP-221458)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

### 8.11.1 Organizational

LS in, rapporteur input etc.

R2-2206965 UE capabilities for MBS (S2-2203020; contact: Qualcomm) SA2 LS in Rel-18 FS\_5MBS\_Ph2 To:RAN1 Cc:RAN, RAN2, RAN3

R2-2206973 Reply LS on UE capabilities for MBS (RP-221861; contact: Qualcomm) RAN LS in Rel-18 FS\_5MBS\_Ph2 To:SA2 Cc:RAN1, RAN2, RAN3

R2-2207770 Rel-18 NR MBS enhancement workplan CATT Work Plan Rel-18 NR\_MBS\_enh-Core

### 8.11.2 Multicast reception in RRC\_INACTIVE

Specify support of multicast reception by UEs in RRC\_INACTIVE state [RAN2, RAN3], PTM configuration for UEs receiving multicast in RRC\_INACTIVE state [RAN2]. Study the impact of mobility and state transition for UEs receiving multicast in RRC\_INACTIVE. (Seamless/lossless mobility is not required) [RAN2, RAN3]

*General assumptions, scenarios*

R2-2207771 Discussion on multicast reception in RRC\_INACTIVE CATT, CBN discussion Rel-18 NR\_MBS\_enh-Core

Proposal 1 In Rel-18, multicast reception for UEs in INACTIVE supports the following scenarios:

- Scenario 1: a UE has been receiving multicast in CONNECTED, and it enters INACTIVE and continues the multicast reception.

- Scenario 2: a UE has joined a multicast session and has been in INACTIVE, the UE starts to receive the multicast session upon activation of this session without going back to CONNECTED.

Proposal 2 It is up to gNB to decide whether a multicast session may be received by UE(s) in INACTIVE. FFS what information gNB may be provided to form such decision.

Proposal 3 It is supported that gNB transmit the same multicast session to both UEs in CONNECTED (Rel-17 or Rel-18 UEs) and INACTIVE (Rel-18 UEs only) in the same cell.

Proposal 4 The following is taken as baseline: the same user plane resources (i.e. resources used for MTCH) are assumed for all UEs (including UEs in CONNECTED and/or INACTIVE states) for receiving the same multicast session.

*PTM configuration for RRC\_INACTIVE*

R2-2208441 Initial consideration on multicast reception in RRC\_INACTIVE CMCC discussion Rel-18 NR\_MBS\_enh-Core

Proposal 3: For PTM configuration delivery, following solutions could be taken into consideration:

Option 1: Dedicated signalling

Option 2: SIB+MCCH like solution

Option 3: Combination of Option 1 and Option 2

Proposal 4: State transition criterion/scenario should be discussed for all three options.

Proposal 5: Rel-17 multicast configuration for RRC\_CONNECTED could be the baseline, while HARQ and PTP are not supported for multicast reception in RRC\_INACTIVE.

*Mobility support*

R2-2208096 Multicast reception by UEs in RRC\_INACTIVE state Qualcomm Incorporated discussion Rel-18 NR\_MBS\_enh-Core

Proposal 1. Multicast service continuity after cell reselection in RRC\_INACTIVE state (i.e. without resuming RRC connection) will be supported.

Proposal 4. Upon cell reselection to neighbour cells within the RNA during active multicast session, if MRB configuration of reselected cell is not provided for RRC\_INACTIVE state, then the UE is required to resume RRC connection to get the Multicast MRB configuration.

*State transitions and notifications*

R2-2207699 Mobility and state transition for multicast reception in RRC\_INACTIVE Lenovo discussion Rel-18

Proposal 4 NW can indicate that UE stays in RRC\_INACTIVE or enters RRC\_CONNECTED for receiving a multicast Session in paging message.

R2-2208093 MBS multicast reception in RRC\_INACTIVE Ericsson discussion Rel-18 NR\_MBS\_enh-Core

Working assumption 12: When the UE receives multicast data in RRC\_INACTIVE the multicast session state can change (configured, active or inactive).

Proposal 4: The gNB uses RRCRelease with suspendConfig to enable the UE to receive multicast in RRC\_INACTIVE.

R2-2207588 Multicast reception in RRC\_INACTIVE Huawei, HiSilicon discussion Rel-18 NR\_MBS\_enh-Core

Proposal 5: Reuse the existing RRC release message to transit the UE to RRC INACTIVE state for multicast service receiving.

Proposal 6a: Reuse legacy group paging to trigger UE to resume from RRC\_INACTIVE state to RRC CONNECTED state in case the network intends to stop providing multicast service for RRC INACTIVE UEs.

R2-2206987 Discussion on supporting group scheduling for RRC\_INACTIVE UEs FGI discussion

R2-2206988 Multicast reception in RRC\_INACTIVE state TD Tech Ltd discussion Rel-18

R2-2206997 Discussion on multicast reception in RRC\_INACTIVE state OPPO discussion Rel-18 NR\_MBS\_enh

R2-2207047 Considerations for Multicast Reception in RRC\_INACTIVE Samsung discussion Rel-18

R2-2207191 Discussion on RAN based Notification Area for Multicast Mobility in RRC Inactive State TCL Communication Ltd. discussion Rel-18

R2-2207204 Overview considerations on Multicast reception in RRC\_INACTIVE NEC Europe Ltd discussion Rel-18 NR\_MBS\_enh-Core

R2-2207227 Supporting Multicast Reception in RRC\_INACTIVE vivo discussion Rel-18 NR\_MBS\_enh-Core

R2-2207318 Discussion on possible approaches to support multicast for inactive UEs Futurewei discussion Rel-18 NR\_MBS\_enh-Core

R2-2207412 State transition for UEs receiving Multicast in RRC\_INACTIVE state TCL Communication Ltd. discussion

R2-2207415 PTM configuration for UEs receiving Multicast in RRC\_INACTIVE state TCL Communication Ltd. discussion

R2-2207447 Multicast reception in RRC\_INACTIVE state Apple discussion Rel-18 NR\_MBS\_enh-Core

R2-2207481 Considerations on the multicast reception in RRC\_INACTIVE Beijing Xiaomi Software Tech discussion Rel-18

R2-2207557 MBS inactive principles Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_MBS\_enh-Core

R2-2207566 Discussion on multicast enhancement for RRC INACTIVE state MediaTek inc. discussion Rel-18 NR\_MBS\_enh-Core

R2-2207689 Discussion on Multicast Reception in RRC\_INACTIVE Spreadtrum Communications discussion Rel-18

R2-2207698 PTM configuration for multicast reception in RRC\_INACTIVE Lenovo discussion Rel-18

R2-2207720 Mobility of UEs receiving multicast in RRC\_INACTIVE state CANON Research Centre France discussion Rel-18 NR\_MBS\_enh-Core

R2-2207730 PTM Configuration in RRC\_INACTIVE SHARP Corporation discussion NR\_MBS\_enh-Core

R2-2208289 Multicast reception in RRC INACTIVE Kyocera discussion Rel-18

R2-2208312 Multicast reception in RRC\_INACTIVE LG Electronics Inc. discussion Rel-18

R2-2208374 MBS support in RRC\_INACTIVE InterDigital, Inc. discussion Rel-18 NR\_MBS\_enh-Core

R2-2208499 Multicast reception in RRC\_INACTIVE Intel Corporation discussion Rel-18 NR\_MBS\_enh-Core

R2-2208520 Discussion on user plane aspects for support of multicast in RRC\_INACTIVE LG Electronics Inc. discussion Rel-18 NR\_MBS\_enh-Core

R2-2208633 Multicast reception in RRC\_INACTIVE ZTE, Sanechips discussion Rel-18 NR\_MBS\_enh-Core

### 8.11.3 Shared processing for MBS broadcast and Unicast reception

Specify Uu signalling enhancements to allow a UE to use shared processing for MBS broadcast and unicast reception, i.e., ‎including UE capability and related assistance information reporting regarding simultaneous unicast reception in RRC\_CONNECTED and MBS broadcast reception from the same or different operators [RAN2]

*Assumptions and baseline solution*

R2-2208182 Shared processing for MBS broadcast and unicast reception Nokia, Nokia Shanghai Bell discussion Rel-18 NR\_MBS\_enh-Core

Proposal 1: RAN2 initially focuses on optimizations on devices with single RX/single TX or dual RX/single TX chains.

Proposal 2: RAN2 focuses either on introducing gaps that is specific for broadcast reception or work on mechanisms that utilize already existing gaps for limited capability UEs that can receive only from one cell at a time.

R2-2208548 Shared processing for simultaneous MBS broadcast and Unicast reception Intel Corporation discussion Rel-18 NR\_MBS\_enh-Core

Proposal 1: LTE solution on shared processing for broadcast and unicast reception is the baseline for NR, i.e. 1) new IE is added in system information to control whether MBSInterestIndication for shared processing can be sent or not; 2) MBSInterestIndication message content and related procedure is updated for shared processing.

Proposal 2: If Proposal 1 is agreed, new IE to control whether MBSInterestIndication for shared processing can be sent or not is added to SIB1.

Proposal 3: If Proposal 1 is agreed, in MBSInterestIndication, for each broadcast service that the UE is receiving or interested to receive, the following parameters are signalled: carrier frequency (ARFCN-ValueNR), subcarrier spacing, and bandwidth of the CFR.

Proposal 4: If Proposal 1 is agreed, shared processing for broadcast and unicast reception is an optional feature without UE capability signalling.

R2-2206989 Simultaneous unicast reception and MBS broadcast reception TD Tech Ltd discussion Rel-18

R2-2206990 A new MCCH transmission method Chengdu TD Tech, TD Tech discussion Rel-18

R2-2206991 MBS reception interruption problem in LTE and NR TD Tech Ltd discussion Rel-18 Withdrawn

R2-2206998 Discussion on support of FTA in NR OPPO discussion Rel-18 NR\_MBS\_enh

R2-2207014 MBS reception interruption problem in LTE and NR Chengdu TD Tech, TD Tech discussion Rel-18

R2-2207184 Discussion on UE shared Processing for Broadcast and Unicast Services Reception TCL Communication Ltd. discussion Rel-18

R2-2207228 Supporting Shared Processing for MBS Broadcast and Unicast vivo discussion Rel-18 NR\_MBS\_enh-Core

R2-2207448 Sharing processing of MBS broadcast and unicast reception Apple discussion Rel-18 NR\_MBS\_enh-Core

R2-2207567 Discussion on broadcast coexistence and signaling enhancement MediaTek inc. discussion Rel-18 NR\_MBS\_enh-Core

R2-2207589 Discussion on shared processing for MBS broadcast and unicast reception Huawei, CBN, HiSilicon discussion Rel-18 NR\_MBS\_enh-Core

R2-2207690 Discussion on shared processing for MBS broadcast and Unicast Reception Spreadtrum Communications discussion Rel-18

R2-2207772 Discussions on shared processing for MBS broadcast and unicast reception CATT, CBN discussion Rel-18 NR\_MBS\_enh-Core

R2-2207808 Discussion on shared processing for MBS broadcast and unicast reception Xiaomi discussion Rel-18 NR\_MBS\_enh-Core

R2-2208092 MBS broadcast and unicast reception with shared resources Ericsson discussion Rel-18 NR\_MBS\_enh-Core

R2-2208097 Shared processing for MBS broadcast and unicast reception Qualcomm Incorporated discussion Rel-18 NR\_MBS\_enh-Core

R2-2208290 Shared processing for simultaneous reception of MBS and unicast Kyocera discussion Rel-18

R2-2208442 Discussion on shared processing for broadcast and unicast reception CMCC discussion Rel-18 NR\_MBS\_enh-Core

R2-2208591 Uu Signaling Enhancements for MBS Samsung discussion Rel-18 NR\_MBS\_enh-Core

R2-2208634 On shared processing for MBS broadcast and Unicast reception ZTE, Sanechips discussion Rel-18 NR\_MBS\_enh-Core