3GPP TSG-RAN WG2 Meeting #114 electronic R2-2xxxxxx

Online, May 17-27, 2021

Source: RAN2 Chairman (MediaTek)

Title: Draft Chairman Notes

# AT-Meeting Email Discussion List, Main Session

NOTE that this is a SHORT meeting, and it will require extra effort to conclude offline email discussions in time.

**Schedule A** (a schedule for main session for many offline dicussion):

A first round with **Deadline for comments Friday May 21 1000 UTC** to settle scope what is agreeable etc (phase 1).

A pre-final round with **Deadline for any functional and/or scope comments Wednesday May 26 1200 UTC.** At this point, non-agreeable parts shall be removed/excluded. (phase 2)

A final round (last 24h) for checking and smaller simplification / removal comments only including agreeable parts, with Deadline **EOM** (at this point all outcome documents need to be available in inbox with tdoc numbers).

Additional check-points etc if needed are defined by the Rapporteur. Offline discussion rapporteur must notify chairman / session chair if on-line comeback discussion is needed, if discussion doesn’t converge etc.

* [AT113bis-e][000] Organizational (Chairman)

Scope: Organizational issues for the R2-114 meeting and the topics treated in the main session (Johan), AI 1, 2, 3 Opening of the meeting approval of agenda, last meetings notes etc. Any issue not fitting in another discussion can be raised here.

Deadline: EOM

* [AT114-e][001][NR15] Stage-2 (Nokia)

Scope: Treat R2-2105783, R2-2105763, R2-2106174, R2-2106170, R2-2105001, R2-2105002, R2-2106194, R2-2106195

Phase 1, For IPA CRs Confirm CRs or identify needed change. Other CRs determine agreeable parts, Phase 2, for IPA CR modifications, and new agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][002][NR15] User Plane (NEC)

Scope: Treat R2-2105747, R2-2105748, R2-2105849, R2-2105850, R2-2106286, R2-2105746, R2-2105555, R2-2105556, R2-2105315, R2-2105316, R2-2106302, R2-2106319, R2-2105469, R2-2105470, R2-2105743, R2-2105761,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][003][NR15] CP IPA and Miscellaneous CRs (Ericsson)

Scope: Treat R2-2105938, R2-2105939, R2-2105106, R2-2105107, R2-2105148, R2-2105149, R2-2105175, R2-2105176, R2-2105204, R2-2105205, R2-2105459, R2-2105462, R2-2105647, R2-2105648, R2-2105931, R2-2105937, R2-2105980, R2-2105981, R2-2106020, R2-2106021, R2-2106180, R2-2106181, R2-2106300, R2-2106308, R2-2106325, R2-2106327, R2-2106390, R2-2106391, R2-2105150, R2-2105151, R2-2105152, R2-2105153, R2-2105180, R2-2105181

Phase 1, For IPA CRs Confirm CRs or identify needed change. Phase 2, for IPA CR modifications, and new contents for Misc Corr CRs, Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: By rapporteur.

* [AT114-e][004][NR15] Connection Control I (Huawei)

Scope: Treat R2-2105769 if needed (on-line first), R2-2106329 (on-line first), R2-2106330 (on-line first), R2-2106304, R2-2106305, R2-2105582, R2-2105583, R2-2105584, R2-2105946, R2-2105947, R2-2105948, R2-2105949, R2-2105649, R2-2105650, R2-2106192, R2-2106193,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][005][NR15] Connection Control II (Apple)

Scope: Treat R2-2105503, R2-2106377, R2-2106378, R2-2106190, R2-2106191, R2-2105768, R2-2106414, R2-2106415, R2-2106416, R2-2105089, R2-2105090, R2-2105092, R2-2106135

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs / LS.

Intended outcome: Report and Agreed CRs / LS.

Deadline: Schedule A

* [AT114-e][006][NR15] Connection Control III (Qualcomm)

Scope: Treat R2-2106188, R2-2106189, R2-2106267, R2-2106270, R2-2105323, R2-2105324, R2-2105767, R2-2106077, R2-2106079, R2-2105950, R2-2105951, R2-2106182, R2-2106183, R2-2106178, R2-2106179,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][007][NR15] Connection Control IV (ZTE)

Scope:, R2-2105392, R2-2105403, R2-2104827, R2-2104828, R2-2105404, R2-2105405, R2-2104905, R2-2104906, R2-2106264, R2-2106265

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][008][NR15] Inter-Node Signalling (Nokia)

Scope: Treat R2-2105468, R2-2106306, R2-2106186, R2-2106187, R2-2106216, R2-2106269, R2-2106331, R2-2106332, R2-2105940, R2-2105945

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][009][NR15] System Information (OPPO)

Scope: Treat R2-2105367, R2-2105368, R2-2104952, R2-2104953, R2-2104954, R2-2104955, R2-2104956,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][010][NR15] UE cap I - BCS for fallback BC (Huawei)

Scope: Await on-line, then treat remaining parts of R2-2105941, R2-2106119, R2-2105171, R2-2105066, R2-2106120, R2-2106121, R2-2106122, R2-2106123, R2-2106360, R2-2105173

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][011][NR15] UE Cap II (Ericsson)

Scope: Treat R2-2105983 , R2-2105984, R2-2105406, R2-2105407, R2-2105408, R2-2106393, R2-2106394, R2-2106124, R2-2106125

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][012][NR15] UE Cap IV (Huawei)

Scope: Scope is dependent on and Discussion will not start until availability of LSes from RAN4. Treat when/if possible R2-2106128, R2-2106129, R2-2105182, R2-2105183, R2-2106130

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Rapporteur will set

* [AT114-e][013][NR15] Idle Inactive mode (ZTE)

Scope: Treat R2-2105751, R2-2105744, R2-2105745, R2-2105752, R2-2105753, R2-2105754, R2-2105755, R2-2106196,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][014][NR16] Stage-2 (Nokia)

Scope: Treat R2-2105474, R2-2105859, R2-2105905, R2-2106389, R2-2106459, R2-2104714, R2-2105185, R2-2105187, R2-2105892, R2-2105955, R2-2105267, R2-2105356, R2-2106176,

Phase 1, For IPA CRs Confirm CRs or identify needed change. Other CRs determine agreeable parts, Phase 2, for IPA CR modifications, and new agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][015][NR16] User Plane IPA CRs (CATT)

Scope: Treat R2-2105762, R2-2105785, R2-2105932, R2-2106206, R2-2106309

Phase 1, For IPA CRs Confirm CRs or identify needed change. Phase 2, for IPA CR modifications, if any, Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][016][NR16] Overlapping UCI and PUSCH/PUCCH (Samsung)

Scope: Determine MAC TS impact of on-line agreement. If agreeable send LS to R1

Intended outcome: Report (if needed), Agreed CR, Approved LS out (if applicable).

Deadline: EOM if possible, otherwise extend to short post email disc.

* [AT114-e][017][NR16] MAC I - UL Skipping (Apple)

Scope: Treat R2-2105780, R2-2104896, R2-2105852, R2-2105112, R2-2106442,

determine agreeable parts, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: EOM, can do short post meeting email for CR(s).

* [AT114-e][018][NR16] MAC III (Nokia)

Scope: Treat R2-2104724, R2-2105231, R2-2105865, R2-2105232, R2-2105749, R2-2106031, R2-2106321, R2-2105851, R2-2105065, R2-2105068

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A (phase 1 Monday instead)

* [AT114-e][019][NR16] BAP (Ericsson)

Scope: Treat R2-2105357, R2-2105875, R2-2106027, R2-2106028, R2-2106218, R2-2106219

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][020][NR16] Control Plane IPA CRs and UE caps Misc Corrections (Intel)

Scope: Treat R2-2104887, R2-2104890, R2-2104788, R2-2104839, R2-2104904, R2-2105104, R2-2105105, R2-2105144, R2-2105184, R2-2105372, R2-2105393, R2-2105417, R2-2105422, R2-2105527, R2-2105602, R2-2105605, R2-2105624, R2-2105732, R2-2106207, R2-2106208, R2-2106284, R2-2106448,

Phase 1, For IPA CRs Confirm CRs or identify needed change. Other CRs determine agreeable parts, Phase 2, for IPA CR modifications, and new agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][021][NR16] RRC I (ZTE)

Scope: Treat R2-2105516, R2-2105179, R2-2104920, R2-2105925, R2-2105926, R2-2105896, R2-2105186, R2-2105421, R2-2106281, R2-2105964, R2-2105965, R2-2105394,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][022][NR16] RRC II (MediaTek)

Scope: Treat R2-2105069, R2-2105423, R2-2105425, R2-2105427, R2-2106338, R2-2106339, R2-2106340, R2-2106282, R2-2106283, R2-2104987, R2-2104717, R2-2105713, R2-2105714, R2-2104985, R2-2104986, R2-2105712, R2-2106115, R2-2106116, R2-2106117, R2-2106118, R2-2105645, R2-2105358, R2-2106464

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][023][NR16] UE capabilities (Intel)

Scope: Treat R2-2104716, R2-2104727, R2-2104884, R2-2104885, R2-2105177, R2-2105178, R2-2105063, R2-2105094, R2-2105095, R2-2105711, R2-2104916, R2-2104917, R2-2104722, R2-2105715, R2-2105247, R2-2105716, R2-2105717, R2-2106316, R2-2104829, R2-2105359, R2-2105360, R2-2105361, R2-2105362

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][024][NR16] Idle Inactive (QC)

Scope: Treat R2-2105651, R2-2106275, R2-2106291, R2-2106294, R2-2106421, R2-2106209, R2-2106210

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

* [AT114-e][025][ePowSav] Subgrouping network architecture (Mediatek)

Scope: Address whether CN or RAN shall be responsible for paging subgrouping based on UE characteristics. As this may be related to availability of information on UE characteristics in the CN or RAN network entity, can also discuss if needed provisioning of assistance information (e.g. between the network entities or from UE to the responsible network entity). The discussion shall be based on the contributions under 8.9.2.

Intended outcome: Report, with discussion, and presenting the main alternatives on the table with documented justifications, way forward.

Deadline: In time for CB online May 25

* [AT114-e][026][QoE] Configuration Reporting General (Qualcomm)

Scope: LS out

Intended outcome: Approved LS out

Deadline: EOM (no CB)

* [AT114-e][027][QoE] Start and Stop (Lenovo)

Scope: LS out

Intended outcome: Approved LS out

Deadline: EOM (no CB)

* [AT114-e][028][eNPN] SNPN and subscription or credentials by a separate entity (China Telecom)

Scope: Start from the baseline, the tdocs under 8.16.2, identify easy agreements, potential agreements, discussion/open points, and identify questions to ask other group, if any,

Intended outcome: Report that paves the way for on-line agreements.

CLOSED

* [AT114-e][029][eNPN] UE onboarding and provisioning for NPN (Ericsson)

Scope: Start from the baseline, the tdocs under 8.16.3, identify easy agreements, potential agreements, discussion/open points, and identify questions to ask other group, if any,

Intended outcome: Report that paves the way for on-line agreements. Make agreements by email, as far as possible.

Deadline: EOM

* [AT114-e][030][NR17] RACH for HO with PSCell (Ericsson)

Scope: Treat R2-2104726, R2-2105777, R2-2105778, R2-2105779, R2-2105776, R2-2104989, R2-2104990, R2-2105093, R2-2105155, R2-2106166

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs, and LS out if applicable.

Intended outcome: Report, Agreed CRs, approved LS

Deadline: Schedule A

* [AT114-e][031][NR17] UL TX Switching (Huawei)

Scope: Treat R2-2104718, R2-2104721, R2-2105156, R2-2105157, R2-2106163, R2-2106164, R2-2106165, R2-2105982, R2-2105623, R2-2105626, R2-2105627, R2-210, R2-210, R2-210, R2-210, R2-210, R2-210, R2-210, R2-210,

Start RAN2 discussion, find agreeable points (if any), and and material for an LS out if applicable.

Intended outcome: Report with agreeable points (if any), agreeable LS out if applicable.

CLOSED

* [AT114-e][032][IoT NTN] TR – TR recommendations essential parts (chairman)

Scope: Progress the RAN2 part of recommendations and essential parts.

Intended outcome: Agreemens, CB points (Report)

Deadline: Start Monday 24th, one pass initial comments 24h, then interactive without deadline.

* [AT114-e][033][IoT NTN] TR update (Eutelsat)

Scope: Review TR and update accordingly, Capture agrements from current meeting, Capture RAN2 Recommendations

Intended outcome: Endorsed TP

Deadline: CB Thursday

* [AT114-e][034][IoT NTN] Other Issues ()

CANCELED

* [AT114-e][035][feMIMO] TCI states indication for PDCCH (Intel)

Scope: Treat R2-2104712 and the related submitted tdocs.

Discuss the topic, attempt to make some basic agreements, e.g. agree to have the requested MAC CE, and potentially identify FFS.

Intended outcome: Report

Deadline: Monday May 24 for on-line CB

* [AT114-e][036][feMIMO] InterCell mTRP and L1/L2 mobility (Samsung)

Scope: Agree on Reply LS to RAN1. Can include all R2 agreements and explicitly formulated replies to R1 questions (to the extent needed/possible)

Intended outcome: Approved LS out

Deadline: EOM (can CB May 27 if needed)

* [AT114-e][037][eIAB] LS to RAN3 (Nokia)

Scope: LS to RAN3 on R2 progress, explicit replies to RAN3 ls on topology adapt.

Intended outcome: Approved LS out (we don't come back on-line)

Deadline: Deadline for comments Tuesday May 25

* [AT114-e][038][MBS] Reply LS on G-RNTI and G-CS-RNTI for MBS (CMCC)

Scope: Capture the related agreement in a reply LS

Intended outcome: Approved LS out

Deadline: EOM

* [AT114-e][039][MBS] MCCH and MCCH change notification (Huawei)

Scope: Determine whether to have multiple MCCH, whether MCCH change notification is needed, and details on the mechanism.

Intended outcome: Report

Deadline: EOM (CB if needed)

* [AT114-e][040][eNPN] Reply LS on limited service availability of an SNPN (Nokia)

Scope: Based on the on-line discussion of R2-2105243, compose a final version of reply LS. Continue discussion to the extent needed in order to provide sufficient information about AS behaviour and options, in order for CT1 to be able to discuss and determine the related NAS impacts and behaviour.

Intended outcome: Approved LS out.

Deadline: EOM if possible (can be continued in a short post meeting discussion)

# 1 Opening of the meeting

**This e-Meeting**

- This e-Meeting follows 3GPP principles for e-Meetings.

- RAN2 114 electronic has full decision power, i.e. full decision power to make agreements and approvals according to RAN WG2 terms of reference, without any need to ratify decisions at a later RAN2 or other meeting. .

## 1.1 Call for IPR

|  |
| --- |
| The attention of the delegates of this Working Group is drawn to the fact that **3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners **to inform their respective Organizational Partners of Essential IPRs** they become aware of.  The delegates were asked to take note that they were hereby invited:   * to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP. * to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms (https://www.etsi.org/images/files/IPR/etsi-ipr-form.doc) |

NOTE: IPRs may be declared to the Director-General or Chairman of the SDO, but not to the RAN WG2 Chairman.

## 1.2 Network usage conditions

1/ To avoid email system overload, please don’t attach files and documents to emails e.g. for offline email discussions, but instead use files placed on the ftp server instead. Inbox/Drafts folder is used for AT-meeting offline discussions.

## 1.3 Other

|  |
| --- |
| In accordance with the Working Procedures it is reaffirmed that:  (i) compliance with all applicable antitrust and competition laws is required;  (ii) timely submissions of work items in advance of TSG or WG meetings are important to allow for full and fair consideration of such matters; and  (iii) the chairman will conduct the meeting with strict impartiality and in the interests of 3GPP |

Note on (i): In case of question please contact your legal counsel.

Note on (ii): WIDs don’t need to be submitted to the RAN2 meeting and will typically not be discussed here either.

# 2 General

## 2.1 Approval of the agenda

[R2-2104700](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104700.zip) Agenda for RAN2#114-e Chairman agenda

## 2.2 Approval of the report of the previous meeting

[R2-2104701](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104701.zip) RAN2#113bis-e Meeting Report MCC report

=> revised, a typo is corrected (on request)

[R2-2106641](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106641.zip) RAN2#113bis-e Meeting Report MCC report

## 2.3 Reporting from other meetings

## 2.4 Others

[R2-2106469](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106469.zip) 3GPP TSG RAN WG2 Handbook (05/2021) Chairman discussion

# 3 Incoming liaisons

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

[R2-2106454](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106454.zip) Stealth Pirating Attack by RACH Rebroadcast Overwriting (SPARROW) (FSAG Doc 93\_009) GSMA LS in To:SA3, RAN2

# 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.

[R2-2104793](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104793.zip) Corrections on the acquisition of a posSI message CATT CR Rel-15 36.331 15.13.0 4611 2 F LCS\_LTE\_acc\_enh-Core R2-2104518

[R2-2104794](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104794.zip) Corrections on the acquisition of a posSI message CATT CR Rel-16 36.331 16.4.0 4612 2 A LCS\_LTE\_acc\_enh-Core R2-2104519

[R2-2104800](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104800.zip) Corrections on the acquisition of a posSI message by BL UE or UE in CE CATT CR Rel-15 36.331 15.13.0 4652 - F LCS\_LTE\_acc\_enh-Core

[R2-2104801](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104801.zip) Corrections on the acquisition of a posSI message by BL UE or UE in CE CATT CR Rel-16 36.331 16.4.0 4653 - A LCS\_LTE\_acc\_enh-Core

[R2-2105209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105209.zip) Corrections to Positioning SI message scheduling for eMTC and NB-IoT Lenovo, Motorola Mobility CR Rel-15 36.331 15.13.0 4656 - F LCS\_LTE\_acc\_enh-Core

[R2-2105210](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105210.zip) Corrections to Positioning SI message scheduling for eMTC and NB-IoT Lenovo, Motorola Mobility CR Rel-16 36.331 16.4.0 4657 - A LCS\_LTE\_acc\_enh-Core

[R2-2105211](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105211.zip) Positioning SI message scheduling for eMTC Lenovo, Motorola Mobility discussion Rel-15 LCS\_LTE\_acc\_enh-Core

[R2-2106410](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106410.zip) Clarification on endTransaction field Samsung CR Rel-14 36.355 14.7.0 0257 - F TEI14

R2-2106405 Clarification on endTransaction field Samsung discussion Rel-14 36.355 TEI14 Withdrawn

## 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.

### 4.5.0 In-principle agreed CRs

Including CRs that were in-principle agreed in RAN2#113bis-e (which do not count towards the Tdoc limit)

[R2-2106137](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106137.zip) Correction on category dependency for DL Category 13 Huawei, HiSilicon CR Rel-16 36.306 16.4.0 1806 2 F TEI16 R2-2104341

### 4.5.1 Other

Including CRs for T325 handling for inter-RAT HO (postponed in RAN2#113bis-e, see R2-2104248 and R2-2104253)

[R2-2106288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106288.zip) Correction on T325 Google Inc. CR Rel-15 36.331 15.13.0 4640 1 F NR\_newRAT-Core R2-2104248

[R2-2106292](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106292.zip) Correction on T325 Google Inc. CR Rel-16 36.331 16.4.0 4641 1 A NR\_newRAT-Core R2-2104253

[R2-2106317](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106317.zip) Minor changes collected by Rapporteur for Rel-15 Samsung CR Rel-15 36.331 15.13.0 4683 - F SPIA\_IDC\_LTE-Core, LTE\_5GCN\_connect-Core

[R2-2106318](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106318.zip) Minor changes collected by Rapporteur for Rel-16 Samsung CR Rel-16 36.331 16.4.0 4684 - F SPIA\_IDC\_LTE-Core, LTE\_5GCN\_connect-Core, TEI16

[R2-2106142](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106142.zip) Correction on integrity verification failure Samsung CR Rel-15 36.323 15.6.0 0294 - F TEI15

[R2-2106143](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106143.zip) Correction on integrity verification failure Samsung CR Rel-16 36.323 16.3.0 0295 - A TEI15

# 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.

* [AT114-e][001][NR15] Stage-2 (Nokia)

Scope: Treat R2-2105783, R2-2105763, R2-2106174, R2-2106170, R2-2105001, R2-2105002, R2-2106194, R2-2106195

Phase 1, For IPA CRs Confirm CRs or identify needed change. Other CRs determine agreeable parts, Phase 2, for IPA CR modifications, and new agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106639](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106639.zip) Offline 001 on Rel-15 Stage 2 Corrections Nokia (Rapporteur)

* [001] Noted, agreements taken into account and reflected below

### 5.2.0       In-principle agreed CRs

[R2-2105783](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105783.zip)   Clarification to data forwarding upon SN change    Ericsson           CR       Rel-15  37.340  15.12.0 0259   1          F          NR\_newRAT-Core        [R2-2103651](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2103651.zip)

Chair: Last meeting it was understood that the CRs in [R2-2105783](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105783.zip) and [R2-2105763](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105763.zip) should be merged with other 37340 CR if suitable target is agreed.

* [001] merged with an update of R2-2106194 into R2-2106685

[R2-2105763](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105763.zip)   Clarification to data forwarding upon SN change    Ericsson           CR       Rel-16  37.340  16.5.0   0260   1          F          NR\_newRAT-Core        [R2-2103652](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2103652.zip)

* [001] merged with an update of R2-2106195 into R2-2106686

[R2-2106174](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106174.zip)   SRB PDCP handling upon handover         Huawei, HiSilicon, Nokia (rapporteur), Ericsson   CR       Rel-15           38.300  15.12.0 0363     2          F          NR\_newRAT-Core        [R2-2104515](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104515.zip)

* [001] Agreed

[R2-2106170](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106170.zip)   SRB PDCP handling upon handover         Huawei, HiSilicon, Nokia (rapporteur), Ericsson   CR       Rel-16           38.300  16.5.0   0364     2          A          NR\_newRAT-Core        [R2-2104516](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104516.zip)

* [001] Agreed

[R2-2105001](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105001.zip)   38.300 CR: removing ambiguous HO naming         Nokia, Nokia Shanghai Bell        CR       Rel-16   38.300  16.5.0   0354     1          F          NR\_Mob\_enh-Core       [R2-2103337](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2103337.zip)

* [001] Agreed

[R2-2105002](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105002.zip)   36.300 CR: removing ambiguous HO naming         Nokia, Nokia Shanghai Bell        CR       Rel-16   36.300  16.5.0   1336     1          F          NR\_Mob\_enh-Core       [R2-2103338](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2103338.zip)

* [001] Agreed

### 5.2.1       TS 3x.300

[R2-2104733](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104733.zip)   LS on Handover terminology (S5-211324; contact: Ericsson)          SA5      LS in     Rel-17  E\_HOO   To:RAN2, RAN3

Chair: Taken into account and Noted already last meeting. Can be withdrawn.

### 5.2.2       TS 37.340

[R2-2106194](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106194.zip)   Correction on PSCell change without security key change  Huawei, HiSilicon          CR       Rel-15   37.340  15.12.0 0269     -           F          NR\_newRAT-Core

* [001] updated and merged with R2-2105783 into R2-2106685

[R2-2106195](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106195.zip)   Correction on PSCell change without security key change  Huawei, HiSilicon          CR       Rel-16

* [001] updated and merged with R2-2105784 into R2-2106686

[R2-2106685](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106685.zip)  Correction on PSCell change without security key change and data forwarding upon SN change with full configuration        Huawei, HiSilicon, Ericsson        CR       Rel-15  37.340

* [001] Agreed

[R2-2106686](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106686.zip)  Correction on PSCell change without security key change and data forwarding upon SN change with full configuration        Huawei, HiSilicon, Ericsson        CR       Rel-16  37.340

* [001] Agreed

## 5.3 User Plane corrections

* [AT114-e][002][NR15] User Plane (NEC)

Scope: Treat R2-2105747, R2-2105748, R2-2106455, R2-2106456, R2-2105849, R2-2105850, R2-2106286, R2-2105746, R2-2105555, R2-2105556, R2-2105315, R2-2105316, R2-2106302, R2-2106319, R2-2105469, R2-2105470, R2-2105743, R2-2105761,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106642](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106642.zip) Report of [AT114-e][002][NR15] User Plane NEC (Rapporteur)

* [002] Noted, agreements reflected below.

### 5.3.0 In-principle agreed CRs

### 5.3.1 MAC

[R2-2105747](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105747.zip) Correction on MAC behavior for suspended radio bearers for Rel-15 Huawei, HiSilicon CR Rel-15 38.321 15.12.0 1107 - F NR\_newRAT-Core

[R2-2105748](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105748.zip) Correction on MAC behavior for suspended radio bearers for Rel-16 Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1108 - F NR\_newRAT-Core

* [002] Both postponed

R2-2106455 Correction on BSR calculation for suspended radio bearers MediaTek CR Rel-15 38.321 15.12.0 1119 - F NR\_newRAT-Core

R2-2106456 Correction on BSR calculation for suspended radio bearers MediaTek CR Rel-16 38.321 16.4.0 1120 - A NR\_newRAT-Core

* [002] Both postponed

[R2-2105849](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105849.zip) Correction to 38.321 on the term of the handover in handling of MAC CE ZTE, Sanechips CR Rel-15 38.321 15.12.0 1110 - F NR\_newRAT-Core

[R2-2105850](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105850.zip) Correction to 38.321 on the term of the handover in handling of MAC CE ZTE, Sanechips CR Rel-16 38.321 16.4.0 1111 - F NR\_newRAT-Core

* [002] Both postponed

[R2-2106286](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106286.zip) Clarification on not monitoring PDCCH for SCell when the SCell is deactivated ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

* [002] Noted

### 5.3.2 RLC PDCP SDAP

Re-establishment and suspended AM DRB

[R2-2105746](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105746.zip) Clarification on PDCP suspend and suspended DRB Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [002] Noted

[R2-2105315](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105315.zip) Correction on suspended AM DRB in PDCP re-establishment NEC, LG Electronics CR Rel-15 38.323 15.7.0 0073 - F NR\_newRAT-Core

[R2-2105316](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105316.zip) Correction on suspended AM DRB in PDCP re-establishment NEC, LG Electronics CR Rel-16 38.323 16.3.0 0074 - A NR\_newRAT-Core

* [002] Changes in R2-2105315 and R2-2105316 are agreed, use cover sheet from R2-2105555.
* [002] both revised

R2-2106699 Correction on suspended AM DRB in PDCP re-establishment NEC, LG Electronics CR Rel-15 38.323 15.7.0 0073 1 F NR\_newRAT-Core

R2-2106700 Correction on suspended AM DRB in PDCP re-establishment NEC, LG Electronics CR Rel-16 38.323 16.3.0 0074 1 A NR\_newRAT-Core

* [002] both Agreed

[R2-2105555](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105555.zip) RRC connection re-establishment Nokia, Ericsson, Nokia Shanghai Bell, Sequans Communications CR Rel-15 38.323 15.7.0 0075 - F NR\_newRAT-Core

[R2-2105556](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105556.zip) RRC connection re-establishment Nokia, Ericsson, Nokia Shanghai Bell, Sequans Communications CR Rel-16 38.323 16.3.0 0076 - A NR\_newRAT-Core

* [002] Both not pursued

[R2-2106302](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106302.zip) Clarification on suspended AM DRB Samsung Electronics Polska CR Rel-15 38.323 15.7.0 0077 - F NR\_newRAT-Core

[R2-2106319](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106319.zip) Clarification on suspended AM DRB Samsung Electronics Polska CR Rel-16 38.323 16.3.0 0079 - A NR\_newRAT-Core

* [002] Both not pursued

PDU Session ID

[R2-2105743](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105743.zip) On change of PDU session ID for an established DRB Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [002] Noted

[R2-2105761](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105761.zip) Change of PDU Session ID Ericsson discussion Rel-15 NR\_newRAT-Core

* [002] Noted
* [002] RAN2 confirms that PDU session ID is not changed after a DRB is established. No change to the specification.

[R2-2105469](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105469.zip) Clarification on the change of PDU session ID Samsung CR Rel-15 38.331 15.13.0 2628 - F NR\_newRAT-Core R2-2103279

[R2-2105470](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105470.zip) Clarification on the change of PDU session ID Samsung CR Rel-16 38.331 16.4.1 2629 - A NR\_newRAT-Core

* [002] Both Not pursued

Not Available

R2-2105264 RRC connection re-establishment Nokia, Nokia Shanghai Bell, , Sequans Communications CR Rel-16 38.323 16.3.0 0071 - A NR\_newRAT-Core Late

## 5.4 Control Plane corrections

* [AT114-e][003][NR15] CP IPA and Miscellaneous CRs (Ericsson)

Scope: Treat R2-2105938, R2-2105939, R2-2105106, R2-2105107, R2-2105148, R2-2105149, R2-2105175, R2-2105176, R2-2105204, R2-2105205, R2-2105459, R2-2105462, R2-2105647, R2-2105648, R2-2105931, R2-2105937, R2-2105980, R2-2105981, R2-2106020, R2-2106021, R2-2106180, R2-2106181, R2-2106300, R2-2106308, R2-2106325, R2-2106327, R2-2106390, R2-2106391, R2-2105150, R2-2105151, R2-2105152, R2-2105153, R2-2105180, R2-2105181

Phase 1, For IPA CRs Confirm CRs or identify needed change. Phase 2, for IPA CR modifications, and new contents for Misc Corr CRs, Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: By rapporteur.

### 5.4.0 In-principle agreed CRs

[R2-2105938](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105938.zip) Miscellaneous non-controversial corrections Set X Ericsson CR Rel-15 38.331 15.13.0 2582 1 F NR\_newRAT-Core R2-2104651

Chair: Can be updated further

* [003] revised

[R2-2105939](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105939.zip) Miscellaneous non-controversial corrections Set X Ericsson CR Rel-16 38.331 16.4.1 2519 2 F NR\_newRAT-Core, TEI16 R2-2104650

Chair: Can be updated further

* [003] revised

[R2-2105204](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105204.zip) Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. CR Rel-15 38.331 15.13.0 2526 2 F NR\_newRAT-Core R2-2104578

Moved here,

- [003] Cover page, update to correct RAN2 meeting and meeting dates

* [003] revised

[R2-2105205](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105205.zip) Clarification on SCellIndex and ServCellIndex NTT DOCOMO, INC. CR Rel-16 38.331 16.4.1 2527 2 A NR\_newRAT-Core R2-2104579

Moved here

- [003] Cover page, update to correct RAN2 meeting and meeting dates

* [003] revised

[R2-2106180](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106180.zip) UL Config Grant capability differentiation for FR1(TDD/FDD) / FR2 Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2579 1 F NR\_newRAT-Core, TEI16 R2-2104609

-     [003] Remove revision marks on cover page.

* [003] revised

[R2-2106181](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106181.zip) UL Config Grant capability differentiation for FR1(TDD/FDD) / FR2 Qualcomm Incorporated CR Rel-16 38.306 16.4.0 0571 1 F NR\_newRAT-Core, TEI16 R2-2104610

-    [003] Remove revision marks on cover page.

-    [003] Remove changes in 4.2.7.10,

* [003] revised

[R2-2105180](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105180.zip) CR on the 35M/45M supporting-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0567 2 F NR\_FR1\_35MHz\_45MHz\_BW-Core R2-2104548

- [003] Use WI Code “TEI15, NR\_FR1\_35MHz\_45MHz\_BW-Core” + very detailed instructions from MCC.

* [003] Revised CR to be provided

[R2-2105181](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105181.zip) CR on the 35M/45M supporting-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0568 2 A NR\_FR1\_35MHz\_45MHz\_BW-Core R2-2104549

* [003] Revised CR to be provided

[R2-2106300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106300.zip) Correction on T325 Google Inc. CR Rel-15 38.331 15.13.0 2563 2 F NR\_newRAT-Core R2-2104254

- [003] Revise cover page similar as was done in revisions for corresponding CRs to 36331 (email discussion [201], R2-2106288 and R2-2106292)

* [003] revised

[R2-2106308](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106308.zip) Correction on T325 Google Inc. CR Rel-16 38.331 16.4.1 2564 2 A NR\_newRAT-Core R2-2104255

- [003] Revise cover page similar as was done in revisions for corresponding CRs to 36331 (email discussion [201], R2-2106288 and R2-2106292)

* [003] revised

[R2-2105106](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105106.zip) Clarification on CGI reporting Apple CR Rel-15 38.331 15.13.0 2601 - F NR\_newRAT-Core

[R2-2105107](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105107.zip) Clarification on CGI reporting Apple CR Rel-16 38.331 16.4.1 2602 - A NR\_newRAT-Core

[R2-2105148](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105148.zip) CR on UE capability in case of Cross-Carrier operation ZTE Corporation, Sanechips, Ericsson CR Rel-15 38.306 15.13.0 0544 2 F NR\_newRAT-Core R2-2104607

[R2-2105149](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105149.zip) CR on UE capability in case of Cross-Carrier operation ZTE Corporation, Sanechips, Ericsson CR Rel-16 38.306 16.4.0 0545 2 A NR\_newRAT-Core R2-2104608

[R2-2105175](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105175.zip) CR on the supportedBandwidthCombinationSet-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0565 2 F NR\_newRAT-Core R2-2104546

[R2-2105176](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105176.zip) CR on the supportedBandwidthCombinationSet-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0566 2 A NR\_newRAT-Core R2-2104547

[R2-2105459](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105459.zip) Clarification on scellFrequenciesSN Nokia, Nokia Shanghai Bell CR Rel-15 38.331 15.13.0 2571 1 F NR\_newRAT-Core R2-2104539

[R2-2105462](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105462.zip) Clarification on scellFrequenciesSN Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2572 1 A NR\_newRAT-Core R2-2104540

[R2-2105647](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105647.zip) Introduction of DL scheduling slot offset capabilities in UERadioPagingInformation Ericsson CR Rel-15 38.331 15.13.0 2638 - F NR\_newRAT-Core

[R2-2105648](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105648.zip) Introduction of DL scheduling slot offset capabilities in UERadioPagingInformation Ericsson CR Rel-16 38.331 16.4.1 2639 - A NR\_newRAT-Core

[R2-2105980](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105980.zip) Correction to the use of simultaneous CSI-RS resources Ericsson, Nokia CR Rel-15 38.306 15.13.0 0593 - F NR\_newRAT-Core

[R2-2105981](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105981.zip) Correction to the use of simultaneous CSI-RS resources Ericsson, Nokia CR Rel-16 38.306 16.4.0 0594 - A NR\_newRAT-Core

[R2-2106325](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106325.zip) Clarification on SCS of active DL and UL BWP MediaTek Inc. CR Rel-15 38.331 15.13.0 2549 2 F NR\_newRAT-Core R2-2104558

[R2-2106327](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106327.zip) Clarification on SCS of active DL and UL BWP MediaTek Inc. CR Rel-16 38.331 16.4.1 2550 2 A NR\_newRAT-Core R2-2104559

[R2-2106390](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106390.zip) Correction to BWP capabilities Nokia, Nokia Shanghai Bell CR Rel-15 38.306 15.13.0 0549 2 F NR\_newRAT-Core R2-2104573

[R2-2106391](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106391.zip) Correction to BWP capabilities Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.4.0 0550 2 A NR\_newRAT-Core R2-2104574

The below 6 treated in R17 Other last meeting

[R2-2105150](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105150.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2495 2 F NR\_newRAT-Core R2-2104581

[R2-2105151](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105151.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2496 2 A NR\_newRAT-Core R2-2104582

[R2-2105152](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105152.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-15 36.331 15.13.0 4646 1 F NR\_newRAT-Core R2-2104583

[R2-2105153](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105153.zip) CR on RRC processing delay ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4647 1 A NR\_newRAT-Core R2-2104584

* [003] All 20 CRs above are agreed

[R2-2105931](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105931.zip) Clarification of CSI measurement configuration Ericsson CR Rel-15 38.331 15.13.0 2517 1 F NR\_newRAT-Core R2-2103643

* [003] merged with Rapporteur CR

[R2-2105937](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105937.zip) Clarification of CSI measurement configuration Ericsson CR Rel-16 38.331 16.4.1 2518 1 A NR\_newRAT-Core, TEI16 R2-2103644

* [003] merged with Rapporteur CR

[R2-2106020](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106020.zip) Clarification of mcg-RB-config field description Ericsson CR Rel-15 38.331 15.13.0 2532 1 F NR\_newRAT-Core R2-2103801

-     [003] CRs in R2-2106186/R2-21061867 provides a preferred wording of the field descriptions. Those CRs are covered in [008]. Outcome of [008] need to be awaited, may impact the wording of the field descriptions.

-     [008] postponed CRs in R2-2106186/R2-21061867, and recommended agreement of the IPA CRs. Since wording need minor polishing, agree to merge with 38331 Rapp CR (to be for email agreement)

* [003] merged with 38331 Rapp/Misc CR

[R2-2106021](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106021.zip) Clarification of mcg-RB-config field description Ericsson CR Rel-16 38.331 16.4.1 2533 1 A NR\_newRAT-Core R2-2103802

* [003] merged with 38331 Rapp/Misc CR

### 5.4.1 NR RRC

#### 5.4.1.1 Connection control

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

Including outcome of email discussion [Post113bis-e][060][NR15] RLC bearer handling with Full Configuration (Ericsson, Mediatek)

Full Configuration (e-mail discussion)

Treat on-line first

[R2-2105769](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105769.zip) Summary of [Post113bis-e][060][NR15] RLC bearer handling with Full Configuration Ericsson, Mediatek Inc. discussion Rel-15 NR\_newRAT-Core

DISCUSSION

- Intel think that some procedures may be impacted. Ericsson think only network behaviour is impacted.

P1

- LG think p1 is strange. Ericsson think that it should be “since RLC is released ..”

P2

- Intel think that for option 1 the current text doesn’t involve establishing a new RLC entity, need to be added. MTK are not sure this is needed, can disucss based on the CR.

P3

- Intel wonder why we need several options. Ericsson think we can use wording “does not set”.

- Intel think that if we have a clear position that UE releases RLC entities then the network doesn’t need to set reestablishRLC. Ericsson agrees. LG also agrees with Intel. MTK are ok as there seems to not be different impl.

- Huawei think current wording is ok.

* When initiating the NR full configuration procedure, RAN2 confirms that UE shall release the RLC bearers (and entities) of SRB and DRB, and establish new acc to the given configuration (so e.g. RLC SN starts at 0 for the new entity / bearer).
* During NR full configuration, the UE can add back the RLC entity based on at least one of the following network options:

1. The network includes *srb-Identity* in *srb-ToAddModList* (default configuration).

2. The network uses rlc-BearerToAddModList to add RLC entities of SRB(s) back explicitly

* RAN2 confirms that during NR full configuration, the network does not set the *reestablishRLC* to *true* in case of the first reconfiguration after reestablishment and RRC resume.
* RAN2 confirms that during NR full configuration, the network does not set the *reestablishPDCP* to true in *case* of the first reconfiguration after reestablishment and RRC resume.
* [AT114-e][004][NR15] Connection Control I (Huawei)

Scope: Treat R2-2106329, R2-2106330, R2-2106304, R2-2106305, R2-2105582, R2-2105583, R2-2105584, R2-2105946, R2-2105947, R2-2105948, R2-2105949, R2-2105649, R2-2105650, R2-2106192, R2-2106193,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106329](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106329.zip) Clarification on RLC bearer handling in full configuration MediaTek Inc., Qualcomm Incorporated, Ericsson, Nokia, Nokia Shanghai Bell, Vivo, Huawei, HiSilicon, ZTE Corporation, Apple CR Rel-15 38.331 15.13.0 2555 1 F NR\_newRAT-Core R2-2104140

[R2-2106330](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106330.zip) Clarification on RLC bearer handling in full Configuration MediaTek Inc., Qualcomm Incorporated, Ericsson, Nokia, Nokia Shanghai Bell, Vivo, Huawei, HiSilicon, ZTE Corporation, Apple CR Rel-16 38.331 16.4.1 2556 1 A NR\_newRAT-Core R2-2104143

* [004] both revised

[R2-2106304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106304.zip) RLC re-establishment upon full configuration Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2689 - F NR\_newRAT-Core

[R2-2106305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106305.zip) RLC re-establishment upon full configuration Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2690 - A NR\_newRAT-Core

- [004] R2-2106304/R2-2106305 are revised to include the changes from R2-2103655/ R2-2103656

* [004] both revised

Resume

[R2-2105582](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105582.zip) Discussion on abortion of resume procedure Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* [004] noted
* [004] If it is agreed to have a CR for connection resume abortion case, both LTE and NR specifications should be corrected.

[R2-2105583](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105583.zip) Clarification on the abortion of RRC connection resume Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2566 1 F NR\_newRAT-Core R2-2104267

[R2-2105584](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105584.zip) Clarification on the abortion of RRC connection resume Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2567 1 A NR\_newRAT-Core R2-2104268

* [004] both revised

[R2-2105948](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105948.zip) Abortion of RRC connection resume procedure by upper layers Ericsson CR Rel-15 36.331 15.13.0 4669 - F NR\_newRAT-Core

Moved from 5.4.2

[R2-2105949](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105949.zip) Abortion of RRC connection resume procedure by upper layers Ericsson CR Rel-16 36.331 16.4.0 4670 - A NR\_newRAT-Core, TEI16

Moved from 5.4.2

* [004] both revised

[R2-2105946](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105946.zip) Abortion of RRC connection resume procedure by upper layers Ericsson CR Rel-15 38.331 15.13.0 2654 - F NR\_newRAT-Core

[R2-2105947](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105947.zip) Abortion of RRC connection resume procedure by upper layers Ericsson CR Rel-16 38.331 16.4.1 2655 - A NR\_newRAT-Core, TEI16

* [004] both not pursued

[R2-2105649](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105649.zip) Clarification for an ongoing establishment and resume procedure Ericsson CR Rel-15 38.331 15.13.0 2640 - F NR\_newRAT-Core

[R2-2105650](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105650.zip) Clarification for an ongoing establishment and resume procedure Ericsson CR Rel-16 38.331 16.4.1 2641 - A NR\_newRAT-Core

* [004] both not pursued

[R2-2106192](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106192.zip) Clarification of initiation of RRC resume procedure Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2682 - F NR\_newRAT-Core

[R2-2106193](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106193.zip) Clarification of initiation of RRC resume procedure Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2683 - A NR\_newRAT-Core

* [004] both not pursued
* [004] The UE should not start the 2nd RRC connection establishment procedure when there is a RRC connection establishment procedure ongoing. (only capture in chairman notes, no spec change is required)
* [AT114-e][005][NR15] Connection Control II (Apple)

Scope: Treat R2-2105503, R2-2106377, R2-2106378, R2-2106190, R2-2106191, R2-2105768, R2-2106414, R2-2106415, R2-2106416, R2-2105089, R2-2105090, R2-2105092, R2-2106135

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs / LS.

Intended outcome: Report and Agreed CRs / LS.

Deadline: Schedule A

DC Related - SCG failure

[R2-2105503](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105503.zip) Further clarification on random access problem ZTE Corporation, Sanechips discussion Rel-15 NR\_newRAT-Core

* [005] Noted
* [005] Confirm that UE shall not declare MCG RLF upon MCG RACH/LBT failure detection while MCG T304 is running (no spec change is needed).
* [005] Confirm that R16 UE shall declare SCG RLF upon MCG RACH/LBT failure detection while SCG T304 is running (no spec change is needed).

[R2-2106377](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106377.zip) CR on random access problem of MCG ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2692 - F NR\_newRAT-Core

[R2-2106378](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106378.zip) CR on random access problem of MCG ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2693 - A NR\_newRAT-Core, NR\_unlic-Core

* [005] both not pursued

[R2-2106190](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106190.zip) Correction on SCG failure reporting procedure Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2680 - F NR\_newRAT-Core

[R2-2106191](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106191.zip) Correction on SCG failure reporting procedure Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2681 - A NR\_newRAT-Core

* [005] both not pursued

DC Related – SMTC and SCG change during handover

[R2-2105768](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105768.zip) Clarification on NR-DC procedures Ericsson discussion Rel-15 NR\_newRAT-Core

[R2-2106414](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106414.zip) Clarification on leftover issues for NR-DC Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

[R2-2105090](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105090.zip) Clarification on NR HO without SCG Configuration Change Apple discussion Rel-15 NR\_newRAT-Core

* [005] 3 tdocs above noted
* [005] Agree that the UE applies the target PCell timing as the PSCell SMTC timing reference during the NR handover with PSCell addition in NR-DC.
* [005] Agree that the UE applies the target PCell timing as the reference of the targetCellSMTC-SCG configuration during the NR handover with PSCell change in NR-DC.

[R2-2105089](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105089.zip) Clarification on the Timing Reference of PSCell SMTC Configuration Apple, Xiaomi, ZTE Corporation, Sanechips, Samsung, CATT, Ericsson, OPPO CR Rel-16 38.331 16.4.1 2598 - F NR\_newRAT-Core, TEI16

- [005] The CR in R2-2105089 is revised according to companies’ comments on the targetCellSMTC-SCG part.

* [005] revised

[R2-2106415](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106415.zip) Correction on PSCell SMTC timing reference in NR-DC Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2694 - F NR\_newRAT-Core

[R2-2106416](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106416.zip) Correction on PSCell SMTC timing reference in NR-DC Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2695 - A NR\_newRAT-Core

* [005] both not pursued

[R2-2106135](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106135.zip) Clarification on NR HO without SCG Configuration Change Apple CR Rel-16 37.340 16.5.0 0267 - F NR\_newRAT-Core, TEI16

* [005] Postponed
* [005] Postpone discussion on whether the reconfigurationWithSync in SCG configuration is mandatory for the LTE handover with NR PSCell in EN-DC.
* [005] Clarify that UE may stop the SCG transmission/reception during the HO without SCG reconfigurationWithSync configuration (no TS impact)

[R2-2105092](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105092.zip) DRAFT LS on the NR HO without SCG Configuration Change Apple LS out Rel-15 NR\_newRAT-Core To:RAN4

* [005] noted, no LS out
* [AT114-e][006][NR15] Connection Control III (Qualcomm)

Scope: Treat R2-2106188, R2-2106189, R2-2106267, R2-2106270, R2-2105323, R2-2105324, R2-2106077, R2-2106079, R2-2105767, R2-2105950, R2-2105951, R2-2106182, R2-2106183, R2-2106178, R2-2106179,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

BWP

[R2-2106188](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106188.zip) Clarification on releasing of BWP Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2678 - F NR\_newRAT-Core

[R2-2106189](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106189.zip) Clarification on releasing of BWP Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2679 - A NR\_newRAT-Core

* [006] Not pursued ?

L1 Parameter

[R2-2106267](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106267.zip) Clarification of recurrence in RateMatchPattern Qualcomm Incorporated CR Rel-15 38.331 15.13.0 2687 - F NR\_newRAT-Core

[R2-2106270](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106270.zip) Clarification of recurrence in RateMatchPattern Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2688 - A NR\_newRAT-Core

* [006] both agreed

[R2-2105323](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105323.zip) Correction on CrossCarrierSchedulingConfig Introduced by Two PUCCH Group CATT CR Rel-15 38.331 15.13.0 2614 - F NR\_newRAT-Core

[R2-2105324](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105324.zip) Correction on CrossCarrierSchedulingConfig Introduced by Two PUCCH Group CATT CR Rel-16 38.331 16.4.1 2615 - A NR\_newRAT-Core

* [006] both agreed

L2 Parameter

[R2-2106077](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106077.zip) Correction on flow remapping to an added DRB Sequans Communications CR Rel-15 38.331 15.13.0 2666 - F NR\_newRAT-Core

[R2-2106079](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106079.zip) Correction on flow remapping to an added DRB Sequans Communications CR Rel-16 38.331 16.4.1 2667 - A NR\_newRAT-Core

- [006] agreeable, merge?

* [006] both revised

Processing Time

[R2-2105767](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105767.zip) RRC processing time for Scell modification Ericsson, Nokia, Nokia Shanghai Bell discussion Rel-15 NR\_newRAT-Core

- [006] split views on this, not agreed to clarify further.

* [006] noted

[R2-2105950](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105950.zip) Correction for RRC Resume latency requirements Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2656 - F NR\_newRAT-Core

[R2-2105951](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105951.zip) Correction for RRC Resume latency requirements Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2657 - A NR\_newRAT-Core

* [006] both agreeable, merge?

Deprioritisation

[R2-2106182](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106182.zip) Clarification on the frequency deprioritisation Huawei, HiSilicon, China Unicom CR Rel-15 38.331 15.13.0 2674 - F NR\_newRAT-Core

Chair: Same issue as IPA R2-2106300/6308 but a different change. If agreeable determine if separate CRs.

[R2-2106183](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106183.zip) Clarification on the frequency deprioritisation Huawei, HiSilicon, China Unicom CR Rel-16 38.331 16.4.1 2675 - A NR\_newRAT-Core

* [006] ?

Other

[R2-2106178](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106178.zip) OverheatingIndicationProhibitTimer for SCG in (NG)EN-DC Qualcomm Incorporated CR Rel-15 38.331 15.13.0 2672 - F NR\_newRAT-Core

[R2-2106179](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106179.zip) OverheatingIndicationProhibitTimer for SCG in (NG)EN-DC Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2673 - A NR\_newRAT-Core

* [006] both not pursued

Common fields in dedicated signalling

Treat online

[R2-2105933](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105933.zip) Configuration of common fields in dedicated signalling Ericsson discussion Rel-15 NR\_newRAT-Core

DISCUSSION

- Ericsson explains that the tdoc has now been updated with more examples, 2.1.2 BWP UL Common contains RACH config common, contains some parameters that are dependent on UE cap which is not signaled. Also the field PRACH root seq index has no capability.

[R2-2104919](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104919.zip) Handling of common configuration Qualcomm Incorporated discussion Rel-15 NR\_newRAT-Core

DISCUSSION

- Ericsson wonder for the HO scenario this would apply, and for this case SI is assued included.

- QC think this may apply in any case.

- Intel think that for delta signalling common we need Need R. Has there been issues. QC think that for servingcellconfigcommonSIB this may be the case but not for servingcellconfigcommon.

- Huawei think that delta signalling for servingcellconfigcommon is not assumed as the configuration is soon overridden by servingcellconfigcommonSIB. QC think that there is a time when servingcellconfigcommon is appled. MTK are not sure it is good to replace dedicated info with SIB info. MTK think that in dedicated info UE caps shall be taken into account.

[R2-2105174](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105174.zip) Discussion on the Common Configuration in the Dedicated Signaling ZTE Corporation, Sanechips discussion Rel-15

=> Revised in [R2-2106451](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106451.zip)

[R2-2106451](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106451.zip) Discussion on the Common Configuration in the Dedicated Signaling ZTE Corporation, Sanechips discussion Rel-15

DISCUSSION

- QC think we have already agreements that are opposite to P2. Network must obey the UE cap.

- Huawei think we should discuss case by case. Ericsson paper is about R16. Is there any issue for R15?

- QC think we need a principle rather than case-by-case assessment. LG agrees think we neded to set general principle first. Ericsson also prefer to set a principle.

- ZTE think we should only discuss R15 if there is a specific issue and wonder whether there should be a compliance check for R16,

- Intel think that if companies want to anayse case by case. Email discussion is very helpful

* Long email discussion
* [Post114-e][0xx][NR15] Common Fields in Dedicated Signalling (Ericsson)

Scope: Continue discussion Spawned from R2-2106451, R2-2104919, R2-2105933. If possible/helpful find a principle that can work, e.g. for R16 (can treat R15 and R16 differently). If found useful, discuss and find issues solutions or exception case by case.

Intended outcome: Report.

Deadline: Long

* [AT114-e][007][NR15] Connection Control IV (ZTE)

Scope: R2-2106460, R2-2106461, R2-2104827, R2-2104828, R2-2105404, R2-2105405, R2-2104905, R2-2104906, R2-2106264, R2-2106265

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

First Active Downlink BWP

Was agreeable last meeting, avoid repeat discussion if possible

R2-2105392 Correction on firstActiveDownlinkBWP-Id ZTE Corporation, Sanechips, Ericsson CR Rel-15 38.331 15.13.0 2530 1 F NR\_newRAT-Core R2-2103793

=> Revised in R2-2106460

[R2-2106460](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106460.zip) Correction on firstActiveDownlinkBWP-Id ZTE Corporation, Sanechips, Ericsson, Nokia CR Rel-15 38.331 15.13.0 2530 2 F NR\_newRAT-Core

* [007] agreed

R2-2105403 Correction on firstActiveDownlinkBWP-Id(R16) ZTE Corporation, Sanechips, Ericsson CR Rel-16 38.331 16.4.1 2531 1 A NR\_newRAT-Core R2-2103794

= Revised in R2-2106461

R2-2106461 Correction on firstActiveDownlinkBWP-Id(R16) ZTE Corporation, Sanechips, Ericsson, Nokia CR Rel-16 38.331 16.4.1 2531 2 A NR\_newRAT-Core

* [007] agreed

Other minor corrections

[R2-2104827](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104827.zip) CR on default configuration OPPO CR Rel-15 38.331 15.13.0 2583 - F NR\_newRAT-Core

[R2-2104828](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104828.zip) CR on default configuration OPPO CR Rel-16 38.331 16.4.1 2584 - A NR\_newRAT-Core

* [007] Both Merged with Rapporteur CRs

[R2-2105404](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105404.zip) Correction on aperiodicSRS-Resource ZTE Corporation, Sanechips CR Rel-15 38.331 15.13.0 2624 - D NR\_newRAT-Core

[R2-2105405](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105405.zip) Correction on aperiodicSRS-Resource(R16) ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2625 - A NR\_newRAT-Core

* [007] Both Merged with Rapporteur CRs

[R2-2104905](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104905.zip) Correction on CSI-RS configuration vivo CR Rel-15 38.331 15.13.0 2587 - F NR\_newRAT-Core

[R2-2104906](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104906.zip) Correction on CSI-RS configuration vivo CR Rel-16 38.331 16.4.1 2588 - A NR\_newRAT-Core

* [007] Both Merged with Rapporteur CRs

[R2-2106264](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106264.zip) Correction on A-CSI trigger state configuration vivo CR Rel-15 38.331 15.13.0 2685 - F NR\_newRAT-Core

[R2-2106265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106265.zip) Correction on A-CSI trigger state configuration vivo CR Rel-16 38.331 16.4.1 2686 - A NR\_newRAT-Core

- [007] R2-2106264 and R2-2106265 are to be revised considering MediaTek’s suggestion, and the revision CRs should be merged to rapporteur CR

* [007] revised

**Withdrawn**

R2-2105091 Clarification on NR HO without SCG Configuration Change Apple discussion Rel-16 37.340 NR\_newRAT-Core, TEI16 Withdrawn

#### 5.4.1.2 Inter-Node RRC messages

* [AT114-e][008][NR15] Inter-Node Signalling (Nokia)

Scope: Treat R2-2105468, R2-2106306, R2-2106186, R2-2106187, R2-2106216, R2-2106269, R2-2106331, R2-2106332, R2-2105940, R2-2105945

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

Inter-MN handover without SN change

[R2-2105468](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105468.zip) Further discussion on full and delta configuration signalling for inter-MN handover without SN change Nokia, Nokia Shanghai Bell, Ericson discussion Rel-15 NR\_newRAT-Core

[R2-2106306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106306.zip) Support of full configuration for inter-MN handover without SN change Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

- [008] Rap: It is suggested to send an LS to RAN3 before concluding this within RAN2.

* [008] 2 tdocs above noted
* [008] discussion postponed

R2-2106682 LS to RAN3 LS out

[R2-2106186](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106186.zip) Correction on full configuration during SN change Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2676 - F NR\_newRAT-Core

[R2-2106187](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106187.zip) Correction on full configuration during SN change Huawei, HiSilicon CR Rel-16 38.331 16.4.0 2677 - A NR\_newRAT-Core

* [008] both postponed

LTE Full config for SN modification

Moved from 5.4.2

[R2-2106216](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106216.zip) Clarification on RRC fullconfig for SN modification NTT DOCOMO INC., Ericsson, Nokia, Nokia Shanghai Bell, Fujitsu, ZTE Corporation, Sanechips, Huawei, HiSilicon CR Rel-15 36.331 15.13.0 4680 - F NR\_newRAT-Core

[R2-2106269](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106269.zip) Clarification on RRC fullconfig for SN modification NTT DOCOMO INC., Ericsson, Nokia, Nokia Shanghai Bell, Fujitsu, ZTE Corporation, Sanechips, Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4681 - A NR\_newRAT-Core

- [008] Agreeable

* [008] Both revised

Other

[R2-2106331](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106331.zip) CR on MN and SN configuration restriction coordination ZTE Corporation, Sanechips, Samsung, NEC, Nokia, Ericsson, CATT CR Rel-15 37.340 15.12.0 0255 1 F NR\_newRAT-Core R2-2103028

[R2-2106332](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106332.zip) CR on MN and SN configuration restriction coordination ZTE Corporation, Sanechips, Samsung, NEC, Nokia, Ericsson, CATT CR Rel-16 37.340 16.5.0 0256 1 A NR\_newRAT-Core R2-2103029

* [008] Both Agreed

[R2-2105940](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105940.zip) Clean-up of INM procedure text Ericsson, Nokia, Nokia Shanghai Bell, Samsung, NTT DOCOMO, INC, ZTE Corporation CR Rel-15 38.331 15.13.0 2515 1 F NR\_newRAT-Core R2-2103641

[R2-2105945](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105945.zip) Clean-up of INM procedure text Ericsson, Nokia, Nokia Shanghai Bell, Samsung, NTT DOCOMO, INC, ZTE Corporation CR Rel-16 38.331 16.4.1 2516 1 A NR\_newRAT-Core, TEI16 R2-2103642

* [008] Both revised

Withdrawn

R2-2105154 CR on MN and SN configuration restriction coordination ZTE Corporation, Sanechips, Samsung, NEC, Nokia, Ericsson, CATT CR Rel-16 38.331 16.4.1 2604 - F NR\_newRAT-Core R2-2103029 Withdrawn

R2-2105388 CR on MN and SN configuration restriction coordination ZTE Corporation, Sanechips, Samsung, NEC, Nokia, Ericsson, CATT CR Rel-16 38.331 16.4.1 2623 - F NR\_newRAT-Core R2-2103028 Withdrawn

R2-2105463 Further discussion on full and delta configuration signalling for inter-MN handover without SN change Nokia Italy discussion Rel-15 NR\_newRAT-Core Withdrawn

#### 5.4.1.3 Other

Including e.g. System Information, RRM and Measurements

* [AT114-e][009][NR15] System Information (OPPO)

Scope: Treat R2-2105367, R2-2105368, R2-2104952, R2-2104953, R2-2104954, R2-2104955, R2-2104956,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

Stored SI

[R2-2105367](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105367.zip) Clarification of cell Identity for SIB validity vivo CR Rel-15 38.331 15.13.0 2621 - F NR\_newRAT-Core

[R2-2105368](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105368.zip) Clarification of cell Identity for SIB validity vivo CR Rel-16 38.331 16.4.1 2622 - A NR\_newRAT-Core

* [009] Both not Pursued

Search space SIB1

[R2-2104952](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104952.zip) Discussion on RMSI reception based on non-zero search space OPPO, CMCC discussion LTE\_NR\_DC\_CA\_enh-Core

* [009] Noted
* [009] No agreements, neither to change anything nor to send LS to R1 to ask.

[R2-2104953](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104953.zip) 38331 R15 RMSI reception based on non-zero search space-option 1 OPPO CR Rel-15 38.331 15.13.0 2591 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2104954](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104954.zip) 38331 R16 RMSI reception based on non-zero search space-option 1 OPPO CR Rel-16 38.331 16.4.1 2592 - A NR\_newRAT-Core

[R2-2104955](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104955.zip) 38331 R15 RMSI reception based on non-zero search space-option 2 OPPO CR Rel-15 38.331 15.13.0 2593 - F NR\_newRAT-Core

[R2-2104956](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104956.zip) 38331 R16 RMSI reception based on non-zero search space-option 2 OPPO CR Rel-16 38.331 16.4.1 2594 - A NR\_newRAT-Core

* [009] 4 CRs above not pursued

### 5.4.2 LTE changes related to NR

Withdrawn

[R2-2105993](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105993.zip) Clarification on RRC full configuration of SgNB Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core Withdrawn

[R2-2105994](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105994.zip) Clarification on RRC full config for SN modification Huawei, HiSilicon CR Rel-15 36.331 15.13.0 4671 - F NR\_newRAT-Core Withdrawn

[R2-2105995](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105995.zip) Clarification on RRC full config for SN modification Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4672 - A NR\_newRAT-Core Withdrawn

### 5.4.3 UE capabilities

BCS for Fallback band combination

Online first

[R2-2105941](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105941.zip) BCS fallback behaviour Ericsson discussion Rel-15 NR\_newRAT-Core

* Noted

[R2-2106119](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106119.zip) Discussion on BCS of a fallback band combination Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

* Noted

DISCUSSION

P2-Huawei

- Apple think that from network perspective this is seen as different capability. QC agrees.

- Apple think network can take into account both parent and child capabilities. QC think that when configuring only one is considered.

- ZTE think that this is ok when the BW includes more bandwidths.

- HW clarifies that the intention is inded to indicate more BWs. MTK support the intention.

- Companies are not clear what is the issue, and there is some reluctance to capture as an agreement.

P3-Hw

- Apple doesn’t support. QC and Oppo also don’t support.

P2-Ericsson

- Oppo think LS is not needed R4 is working on ie. CATT are not sure about LS, too late to send strong recommendations,

- Nokia think we don’t need an LS to R4.

Chair: No support for recommendation to R4. No support for HW proposal 3.

- Nokia think we also don’t need CRs, the agreement can be understood from the current TS.

- Intel think it is ok to check CRs.

Chair (on HW P2): It is clear that the UE is allowed to explicitly signal a fallback BC with the same BCS number as the parent BC which should not be ignored by the network. The BCS number point to a different entry in the R4 TS.

* RAN2 confirms that the channel bandwidths of a (not signalled) fallback BC are determined by the bandwidth combination set (BCS) that the UE supports for the explicitly signalled parent BC. In other words, the NW interprets a BCS ID only in combination with the table row that the signalled BC refers to.

Chair: Continue the email discussion see if CRs can be agreed.

* [AT114-e][010][NR15] UE cap I - BCS for fallback BC (Huawei)

Scope: R2-2105171, R2-2105066, R2-2106120, R2-2106121, R2-2106122, R2-2106123, R2-2106360, R2-2105173

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2105171](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105171.zip) Further Discussion on the BCS with Different Supported Bandwidths ZTE Corporation, Sanechips discussion Rel-15

[R2-2105066](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105066.zip) Left issue on fallback BC OPPO discussion Rel-15 NR\_newRAT-Core

* [010] 2 tdocs above noted

[R2-2106120](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106120.zip) Clarification on BCS of a fallback band combination Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0595 - F NR\_newRAT-Core

[R2-2106121](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106121.zip) Clarification on BCS of a fallback band combination Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0596 - A NR\_newRAT-Core

- [010] Rap: Proposal 1: The CRs in R2-2106120/R2-2106121 can be pursued considering the comments of Phase 1 discussion, e.g. adding a NOTE to reflect the online agreements, adding clarifications to the definition of Fallback band combination as what we clarified for LTE specification.

- [010] one company want to postpone

* [010] Both revised

[R2-2106360](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106360.zip) CR on the fallback Band Combination Removing-R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0606 - F NR\_newRAT-Core

[R2-2105173](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105173.zip) CR on the fallback Band Combination Removing-R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0580 - A NR\_newRAT-Core

- [010] Rap: Proposal 2: The CRs in R2-2106360/R2-2105173 can be pursued considering the comments of Phase 1 discussion

* [010] Both revised

[R2-2106122](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106122.zip) Introduction of indication for BCS of a fallback band combination Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0597 - F NR\_newRAT-Core

[R2-2106123](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106123.zip) Introduction of indication for BCS of a fallback band combination Huawei, HiSilicon CR Rel-15 38.331 15.13.0 2668 - F NR\_newRAT-Core

* [010] not pursued
* [AT114-e][011][NR15] UE Cap II (Ericsson)

Scope: Treat R2-2105983, R2-2105984, R2-2105406, R2-2105407, R2-2105408, R2-2106393, R2-2106394, R2-2106124, R2-2106125

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106710](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106710.zip) Summary of offline 011 Rel-15 UE caps II Ericsson

* [011] noted, agreements taken into account below

BWP bandwidths

[R2-2105983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105983.zip) Allowed bandwidth in BWP configuration Ericsson discussion

- [011] Rapporteur half-tme proposed conclusion: RAN2 confirms that the union of the bandwidths of the configured (initial + dedicated) BWPs may exceed the maximum channel bandwidth supported by the UE. In this case, BWP switching via DCI is not used and BWP inactivity timer is not configured, BWP switching can only be performed via the configuration of firstActiveDown(Up)linkBWP-Id and down(up)linkChannelBW-PerSCS-List that spans the UE specific channel BW that matches the BWP to be switched to.

- [011] more comments

* [011] noted, this discussion is postponed

NR-DC – CA parameters extensions for NR-DC

[R2-2105984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105984.zip) Use of CA-Parameters extensions for NR-DC Ericsson discussion

- [011] Rap: Proposal 6 Update 38.331 to capture the inheritance behaviour of ca-ParametersNR for NR-DC. Comments to the draft CRs can be discussed in phase 2.

* [011] noted
* [011] The inheritance of ca-ParametersNR(-vXXX) upon absence of ca-ParametersNR-forDC(-vXXX) for NR-DC is handled independently for each extension of ca-ParametersNR-forDC(-vXXX).

[R2-2106711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106711.zip) Correction to ca-ParametersNR-ForDC Ericsson, Intel CR Rel-15 38.331 15.13.0 2698 - F

* [011] Agreed

[R2-2106712](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106712.zip) Correction to ca-ParametersNR-ForDC Ericsson, Intel CR Rel-16 38.331 16.4.1 2699 - A

* [011] Agreed

Misc L1 related

[R2-2105406](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105406.zip) Discussion on multipleCORESET ZTE Corporation, Sanechips discussion Rel-15 38.306 NR\_newRAT-Core

* [011] RAN2 confirms that: if the UE supports multipleCORESET and CORESET0 is not configured or associated in one BWP, up to two CORESETs can be configured in this BWP; if the UE does not support multipleCORESET and CORESET0 is not configured or associated in one BWP, up to one CORESET can be configured in this BWP.

[R2-2105407](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105407.zip) Correction on multipleCORESET ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0585 - F NR\_newRAT-Core

[R2-2105408](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105408.zip) Correction on multipleCORESET(R16) ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0586 - A NR\_newRAT-Core

* [011] both not pursued

[R2-2106393](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106393.zip) Clarification on maximum number of TCI-state for PDSCH MediaTek Inc. CR Rel-15 38.306 15.13.0 0607 - F NR\_newRAT-Core

[R2-2106394](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106394.zip) Clarification on maximum number of TCI-state for PDSCH MediaTek Inc. CR Rel-16 38.306 16.4.0 0608 - A NR\_newRAT-Core

- [011] Rap: The CRs R2-2106393 and R2-2106394 on maximum number of TCI-state for PDSCH are pursued, comments for possible revisions to the CRs can be discussed in phase 2.

* [011] both revised

R2-2106739 Clarification on maximum number of TCI-state for PDSCH MediaTek Inc. CR Rel-15 38.306 15.13.0 0607 1 F NR\_newRAT-Core

R2-2106740 Clarification on maximum number of TCI-state for PDSCH MediaTek Inc. CR Rel-16 38.306 16.4.0 0608 1 A NR\_newRAT-Core

* [011] Both agreed

**Others**

[R2-2106124](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106124.zip) Further clarification on supportedNumberTAG Huawei, HiSilicon, Apple CR Rel-15 38.306 15.13.0 0598 - F NR\_newRAT-Core

[R2-2106125](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106125.zip) Further clarification on supportedNumberTAG Huawei, HiSilicon, Apple CR Rel-16 38.306 16.4.0 0599 - A NR\_newRAT-Core

- [011] Rap: The CRs R2-2106124 and R2-2106125 on supportedNumberTAG are pursued, comments for possible revisions to the CRs can be discussed in phase 2.

* [011] Both Revised

R2-2106743 Further clarification on supportedNumberTAG Huawei, HiSilicon, Apple CR Rel-15 38.306 15.13.0 0598 1 F NR\_newRAT-Core

R2-2106744 Further clarification on supportedNumberTAG Huawei, HiSilicon, Apple CR Rel-16 38.306 16.4.0 0599 1 A NR\_newRAT-Core

* [011] Both agreed

Withdrawn

[R2-2106126](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106126.zip) Clarification on pdcch-MonitoringAnyOccasions Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0600 - F NR\_newRAT-Core

=> withdrawn

[R2-2106127](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106127.zip) Clarification on pdcch-MonitoringAnyOccasions Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0601 - A NR\_newRAT-Core

=> withdrawn

* [AT114-e][012][NR15] UE Cap IV (Huawei)

Scope: Scope is dependent on and Discussion will not start until availability of LSes from RAN4. Treat when/if possible R2-2106128, R2-2106129, R2-2105182, R2-2105183, R2-2106130

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Rapporteur will set

NR-DC - SimultaneousRxTx

Wait for R4 reply to R2-2102495

[R2-2106128](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106128.zip) Clarification on the simultaneousRxTxInterBandCA capability in NR-DC Huawei, HiSilicon CR Rel-15 38.306 15.13.0 0561 1 F NR\_newRAT-Core R2-2104023

[R2-2106129](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106129.zip) Clarification on the simultaneousRxTxInterBandCA capability in NR-DC Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0562 1 A NR\_newRAT-Core R2-2104024

Intra-band EN-DC

Wait for R4 reply to R2-2104550

[R2-2105182](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105182.zip) CR on the Intra-band and Inter-band EN-DC Capabilities - R15 ZTE Corporation, Sanechips CR Rel-15 38.306 15.13.0 0517 2 F NR\_newRAT-Core R2-2104186

[R2-2105183](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105183.zip) CR on the Intra-band and Inter-band EN-DC Capabilities - R16 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0518 2 A NR\_newRAT-Core R2-2104187

Intra-band EN-DC - Contiguous and non-contiguous

Wait for R4 LS

[R2-2106130](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106130.zip) Discussion on contiguous and non-contiguous for intra-band EN-DC Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core R2-2104030

IMS video capabilities

Treat on-line if time otherwise not treat at all.

[R2-2105629](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105629.zip) Discussion on IMS video capabilities Google Inc. discussion Rel-15 NR\_newRAT-Core

[R2-2105641](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105641.zip) Indication of unsupported capabilities for IMS video Google Inc. CR Rel-15 38.306 15.13.0 0588 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2105644](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105644.zip) Indication of unsupported capabilities for IMS video Google Inc. CR Rel-15 36.306 15.10.0 1813 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2105677](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105677.zip) Introduction of capabilities for IMS video Google Inc. CR Rel-16 38.306 16.4.0 0589 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2105679](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105679.zip) Introduction of capabilities for IMS video Google Inc. CR Rel-16 36.306 16.4.0 1814 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2105737](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105737.zip) Introduction of capabilities for IMS video Google Inc. CR Rel-16 38.331 16.4.1 2645 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2105794](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105794.zip) Introduction of capabilities for IMS video Google Inc. CR Rel-16 36.331 16.4.0 4664 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core

[R2-2105188](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105188.zip) Clarification on IMS video over split bearer in (NG)EN-DC Google Inc. CR Rel-15 36.306 15.10.0 1811 - F NR\_newRAT-Core

[R2-2105189](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105189.zip) Clarification on IMS video over split bearer in (NG)EN-DC Google Inc. CR Rel-16 36.306 16.4.0 1812 - A NR\_newRAT-Core

[R2-2105190](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105190.zip) Clarification on IMS video over split bearer in NR-DC and NE-DC Google Inc. CR Rel-15 38.306 15.13.0 0581 - F NR\_newRAT-Core

[R2-2105191](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105191.zip) Clarification on IMS video over split bearer in NR-DC and NE-DC Google Inc. CR Rel-16 38.306 16.4.0 0582 - A NR\_newRAT-Core

Withdrawn

R2-2105169 CR on the Intra-band and Inter-band EN-DC Capabilities - R15 ZTE Corporation, Sanechips draftCR Rel-15 38.306 15.13.0 F NR\_newRAT-Core R2-2104186 Withdrawn

R2-2105170 CR on the Intra-band and Inter-band EN-DC Capabilities - R16 ZTE Corporation, Sanechips draftCR Rel-16 38.306 16.4.0 A NR\_newRAT-Core R2-2104187 Withdrawn

R2-2105640 Indication of unsupported capabilities for IMS video Google Inc. CR Rel-15 38.331 15.13.0 2635 - F NR\_newRAT-Core, LTE\_5GCN\_connect-Core Withdrawn

R2-2105172 CR on the fallback Band Combination Removing-R15 ZTE Corporation, Sanechips draftCR Rel-15 38.306 15.13.0 F NR\_newRAT-Core Withdrawn

### 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)

* [AT114-e][013][NR15] Idle Inactive mode (ZTE)

Scope: Treat R2-2105751, R2-2105744, R2-2105745, R2-2105752, R2-2105753, R2-2105754, R2-2105755, R2-2106196,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

**PO misalignment**

[R2-2105751](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105751.zip) Discussion on PO determination for UE in inactive state ZTE corporation, Sanechips, Ericsson discussion Rel-15 NR\_newRAT-Core

[R2-2106196](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106196.zip) Discussion on PO misalignment for INACTVIE and IDLE states Huawei, HiSilicon discussion Rel-15 NR\_newRAT-Core

[R2-2104907](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104907.zip) Discussion on paging DRX cycle determination for inactive mode vivo discussion Rel-15 NR\_newRAT-Core Late

* [013] the three documents above are noted

DISCUSSION

- [013] Chairman: Several companies object to have a standard solution also in Rel-16, and given that there is a (quite simple) workaround, and Rel-16 is frozen since long time, the objections seems to have higher precedence than the desire to have a solution ASAP.

- [013] Chairman: There seems to be support / high interest to have a standardized solution. For now assume that such solution is for Rel-17, if one can be agreed in the end. Depending on the nature of the chosen solution, it can be further discussed whether it can also be acceptable for Rel-16.

- [013] the issue is postponed, companies are encouraged to coordinate before next meeting.

* [013] 1: RAN2 understand the index of the PO (i.e. the i\_s) calculated based on the same UE ID may be different in inactive state and idle state when the DRX cycle for inactive and idle state are different. If a UE in inactive state only monitors the PO derived for inactive state, CN paging failure would happen in both NR and eLTE .
* [013] 2: For Rel-15, it is up to NW implementation to ensure RAN and CN paging occasions overlap in both NR and eLTE
* [013] Whether a standard solution should be supported in later releases (Rel-16 or Rel-17) for NR and eLTE, and if so, the choice of solution, is Postponed

[R2-2105744](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105744.zip) Correction on PO determination for UE in inactive state-38.304 ZTE corporation, Sanechips, Ericsson CR Rel-16 38.304 16.4.0 0208 - F NR\_newRAT-Core

[R2-2105745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105745.zip) Correction on PO determination for UE in inactive state-38.306 ZTE corporation, Sanechips, Ericsson CR Rel-16 38.306 16.4.0 0592 - F NR\_newRAT-Core

[R2-2105752](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105752.zip) Correction on PO determination for UE in inactive state-38.331 ZTE corporation, Sanechips, Ericsson CR Rel-16 38.331 16.4.1 2646 - F NR\_newRAT-Core

[R2-2105753](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105753.zip) Correction on PO determination for UE in inactive state-36.331 ZTE corporation, Sanechips, Ericsson CR Rel-16 36.331 16.4.0 4663 - F LTE\_5GCN\_connect-Core

[R2-2105754](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105754.zip) Correction on PO determination for UE in inactive state-36.304 ZTE corporation, Sanechips, Ericsson CR Rel-16 36.304 16.3.0 0826 - F LTE\_5GCN\_connect-Core

[R2-2105755](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105755.zip) Correction on PO determination for UE in inactive state-36.306 ZTE corporation, Sanechips, Ericsson CR Rel-16 36.306 16.4.0 1815 - F LTE\_5GCN\_connect-Core

* [013] All postponed

## 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.

[R2-2105052](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105052.zip) Correction to E-CID-R15 Huawei, HiSilicon CR Rel-15 38.305 15.8.0 0063 1 F NR\_newRAT-Core R2-2101816

[R2-2105053](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105053.zip) Correction to E-CID-R16 Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0064 1 F NR\_pos-Core R2-2101817

[R2-2106411](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106411.zip) Clarification on endTransaction field Samsung CR Rel-15 37.355 15.1.0 0309 - A TEI14

**Withdrawn**

R2-2106406 Clarification on endTransaction field Samsung discussion Rel-15 37.355 TEI14 Withdrawn

# 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.

## 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.

* [AT114-e][014][NR16] Stage-2 (Nokia)

Scope: Treat R2-2105474, R2-2105859, R2-2105905, R2-2106389, R2-2106459, R2-2104714, R2-2105185, R2-2105187, R2-2105892, R2-2105955, R2-2105267, R2-2105356, R2-2106176,

Phase 1, For IPA CRs Confirm CRs or identify needed change. Other CRs determine agreeable parts, Phase 2, for IPA CR modifications, and new agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106640](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106640.zip) Offline 014 on Rel-16 Stage 2 Corrections Nokia (Rapporteur)

* [014] Noted, agreements taken into account below

#### 6.1.2.0            In-principle agreed CRs

[R2-2105474](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105474.zip)   Clarification on IP packet type in DedicatedInfoF1c Nokia, Nokia Shanghai Bell        CR       Rel-16   37.340  16.5.0   0258     1          F          NR\_IAB-Core    [R2-2103557](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2103557.zip)

Moved here

* [014] Agreed

[R2-2105859](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105859.zip)   Miscellaneous corrections on DCCA, 2-step RACH, IIOT    ZTE, Sanechips CR       Rel-16  37.340   16.5.0   0261     2          F          LTE\_NR\_DC\_CA\_enh-Core, NR\_2step\_RACH-Core, NR\_IIOT-Core   [R2-2104611](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104611.zip)

* [014] Agreed

[R2-2105905](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105905.zip)   Addition of size limitation for SRVCC         Ericsson, Nokia CR       Rel-16  38.300  16.5.0   0352     2   F          SRVCC\_NR\_to\_UMTS  [R2-2104617](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104617.zip)

* [014] Agreed

[R2-2106389](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106389.zip)   Updated Multi-TRP Stage-2 description     Nokia (rapporteur)         CR       Rel-16  38.300  16.5.0   0359   1          F          NR\_feMIMO-Core         [R2-2103640](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2103640.zip)

* [014] Agreed

[R2-2106459](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106459.zip)   Missing IAB SA mode for QoS description Samsung          CR       Rel-16  38.300  16.5.0   0386     2   F          NR\_IAB-Core    [R2-2104647](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104647.zip)

Chair: was erroneously captured as “agreed” last meeting

* [014] Agreed

 Withdrawn

[R2-2105891](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105891.zip)   Addition of size limitation for SRVCC         Ericsson           CR       Rel-16  38.300  16.5.0   0377     -   F          SRVCC\_NR\_to\_UMTS  Withdrawn

#### 6.1.2.1            TS 3x.300

NR-U

[R2-2104714](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2104714.zip)   LS on maximum size change of switchTriggerToAddModList-r16 and switchTriggerToReleaseList-r16, and update to TS 38.300 (R1-2104094; contact: Lenovo)    RAN1   LS in     Rel-16  NR\_unlic-Core   To:RAN2

* [014] Noted

[R2-2105185](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105185.zip)   Correction on descriptions of PDCCH features       Huawei, HiSilicon          CR       Rel-16  38.300   16.5.0   0371     -           F          NR\_unlic-Core

* [014] Not pursued

[R2-2105955](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105955.zip)   Description of PDCCH features introduced for NR-U          Lenovo, Motorola Mobility, Ericsson        CR   Rel-16  38.300  16.5.0   0378     -           F          NR\_unlic-Core

* [014] Merge into Rapporteur CR R2-2106655

 IIOT

[R2-2105187](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105187.zip)   Correction on PDCP duplication for a radio bearer  Huawei, HiSilicon          CR       Rel-16  38.300   16.5.0   0372     -           F          NR\_IIOT-Core

* [014] Merge into Rapporteur CR R2-2106655

SRVCC

[R2-2105892](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105892.zip)   Removing incorrect SRVCC limitation        Ericsson, Nokia CR       Rel-16  36.300  16.5.0   1344     -   F          SRVCC\_NR\_to\_UMTS

* [014] Not pursued

IAB

[R2-2105356](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105356.zip)   Corrections on stage-2 description for IAB vivo      CR       Rel-16  38.300  16.5.0   0375     -           F   NR\_IAB-Core

* [014] Incorporate 1st change only into Rapporteur CR R2-2106655

Misc

[R2-2105267](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2105267.zip)   Miscellaneous Corrections            Nokia (Rapporteur), Apple, Ericsson, Nokia Shanghai Bell           CR   Rel-16  38.300  16.5.0   0373     -           F          NR\_newRAT-Core

* [014] Initially: agreed as baseline
* [014] revised in R2-2106655

[R2-2106655](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106655.zip)   Miscellaneous Corrections            Nokia (Rapporteur), Apple, Ericsson, Nokia Shanghai Bell           CR   Rel-16  38.300  16.5.0   0373     1          F          NR\_newRAT-Core

* [014] agreed

#### 6.1.2.2            TS 37.340

[R2-2106176](https://www.3gpp.org/ftp/tsg_ran/WG2_RL2/TSGR2_114-e/Docs/R2-2106176.zip)   Overheating assistance configuration for SCG in EN-DC    Qualcomm Incorporated CR       Rel-16   37.340  16.5.0   0268     -           F          NR\_newRAT-Core, TEI16

* [014] Not pursued

### 6.1.3 User Plane corrections

* [AT114-e][015][NR16] User Plane IPA CRs (CATT)

Scope: Treat R2-2105762, R2-2105785, R2-2105932, R2-2106206, R2-2106309

Phase 1, For IPA CRs Confirm CRs or identify needed change. Phase 2, for IPA CR modifications, if any, Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106658](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106658.zip) Summary of [AT114-e][015][NR16] User Plane IPA CRs CATT (Rapporteur)

* [015] Noted, agreements taken into account below

#### 6.1.3.0 In-principle agreed CRs

[R2-2105762](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105762.zip) Corrections on MAC handling of uplink grants within a bundle CATT CR Rel-16 38.321 16.4.0 1070 2 F NR\_IIOT-Core R2-2104541

* [015] Agreed

[R2-2105785](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105785.zip) Clarification on which uplink grants participate to the intra-UE prioritization procedure CATT, Samsung, Ericsson CR Rel-16 38.321 16.4.0 1066 1 F NR\_IIOT-Core R2-2102763

* [015] Agreed

[R2-2105932](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105932.zip) Corrections to BSR/PHR content for NR-U ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1075 1 F NR\_unlic-Core R2-2103023

* [015] Agreed

[R2-2106206](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106206.zip) Miscellaneous corrections on BAP transmitting operation and default routing Huawei, HiSilicon CR Rel-16 38.340 16.4.0 0015 2 F NR\_IAB-Core R2-2104560

* [015] Agreed

[R2-2106309](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106309.zip) PDCP miscellaneous corrections LG Electronics Inc. (PDCP rapporteur) CR Rel-16 38.323 16.3.0 0078 - F NR\_IIOT-Core, 5G\_V2X\_NRSL-Core

* [015] Agreed

#### 6.1.3.1 MAC

Overlapping UCI and PUSCH

Treat online first

[R2-2104895](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2104895.zip) On UCI multiplexing visibility from MAC CATT discussion NR\_IIOT-Core

* Noted

[R2-2105781](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2105781.zip) Discussion on overlapped data and SR with equal PHY priority Samsung discussion Rel-16 NR\_IIOT-Core

* Noted

DISCUSSION

- Chair: CATT paper shows that MAC can be aware of L1 outcomes on UCI multiplexing from timeline perspective. However there are many papers proposing that it is better that MAC is not required to know. Chair assumes that this is due to varying implementaitions. Thus conclude that timeline alone is not sufificient to establish a principle, and thus no principal assumption on MAC L1 inter-knowledge can be established. Have to discuss case by case.

- Chair: Understand that the understanding 1 has less requirements on UE impl and has significant support. Seems that the possible ways forward are

**A Way Forward:** *Either to leave to UE impl or specify that we don’t require MAC to use knowledge about UCI multiplexing for the concerned cases*.

- Apple are ok to leave to UE impl and think that understanding 2 is possible, would like to clarify in the MAC TS with a Note that if UL skipping and LCH prio is enabled then MAC can use knowledge about UCI multiplexing.

- ZTE agrees that MAC can be aware but also agree that there is no requirement for MAC to know. Would like to leave to implementation.

- **Another way forward**: *Ericsson think that in R16 we can disallow simult config of R16 UL skipping and LCH based prioritization.* Think the issue may impact also gNB blind detection and leave to UE impl is not good.

- LG think that there is no big harm if the MAC doesn’t know. Would be ok with Ericssons way forward. Think it may save some additional work.

- Huawei think we cannot leave this to UE implementation as indeed this would give too much uncertatinty for gNB, can accept Ericsson way forward.

- MTK would be ok to leave this to UE impl. MTK think that with intra-UE prioritization there would naturally be uncertainty. Think maybe the Ericsson proposal might be ok, but wonder about the consequences. Ericsson think the intra-UE prioritization is not the main feature for URLLC, think UL skipping is more baseline.

- Huawei think indeed uncertaintly is increased by adding these features together. R1 need to specify behaviour based on both understandings which would not be good.

- QC agree with CATT and Apple that understanding 2 is possible and the mAC UE awareness of UCI can be left for UE implementation. Not sure whether anything need to be captured in the TS. Think possibly Ericssons way forward can be interesting.

- Oppo also think this can be left for UE implementation. Don’t need to specify anything.

- **Another way forward:** *CATT wonder if UE could have a UE cap to indicate whether understanding 1 or 2 are applicable for a certain UE.*

- vivo think that leave to UE impl is the only way forward. Think we can await R1 conclusions also.

- Xiaomi also think this can be left for UE impl. Think there are R15 UL skip and R16 enhanced UL skip. And for R15 it is mandatory for the UE to skip. How can this work? Ericsson think R15 UL skip has not been impl by anyone.

- Nokia think Ericsson Way Forward is only the last resort. Think that leave to UE impl is not the best way.

- Samsung think that leave to UE impl flexibility is good but prefer deterministic behaviour.

- DCM prefer a way forward the keep NB blind dec low.

SoH Pref Obj

Understanding 1: MAC does not use knowledge of UCI multiplexing 14 -

Understanding 2: MAC is aware and uses knowledge of UCI multiplexing 5

* We go with Understanding 1: MAC does not use knowledge of UCI multiplexing when MAC executes LCH based prioritization and deciding when to transmit SR (i.e. in the context of the cases listed in R2-2105781)

Determine the TS impact by email.

* [AT114-e][016][NR16] Overlapping UCI and PUSCH/PUCCH (Samsung)

Scope: Determine MAC TS impact of on-line agreement. If agreeable send LS to R1

Intended outcome: Report (if needed), Agreed CR, Approved LS out (if applicable).

Deadline: EOM if possible, otherwise extend to short post email disc.

* [016] MAC CR is postponed (until R1 has made more progress).

[R2-2105866](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2105866.zip) Interaction between MAC and PHY for UCI Multiplexing Issues Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_IIOT-Core

[R2-2105854](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2105854.zip) Consideration on interaction between L1 and L2 in MAC spec ZTE, Sanechips discussion Rel-16 NR\_IIOT-Core

[R2-2105113](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2105113.zip) Discussion of UCI multiplexing and overlapped SR/PUSCH Apple discussion Rel-16 NR\_IIOT-Core

[R2-2104759](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2104759.zip) Remaining issues on overlapped PUSCH and UCI with UL skipping vivo discussion Rel-16 NR\_IIOT-Core

[R2-2105230](file:///C:\3GPP%20meetings\RAN2\2021\TSGR2_114-e\docs\R2-2105230.zip) Draft reply LS to RAN1 on overlapped data and SR are of equal L1 priority vivo LS out Rel-16 NR\_IIOT-Core To:RAN1

[R2-2104864](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2104864.zip) MAC behaviour for overlapped UCI(s), SR and PUSCH with equal L1 priority Huawei, HiSilicon discussion Rel-16 NR\_IIOT-Core

[R2-2105564](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2105564.zip) Consideration on the UCI multiplexing OPPO discussion Rel-16 NR\_IIOT-Core

[R2-2105673](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\docs\R2-2105673.zip) On Intra-UE prioritization and UL skipping Ericsson discussion Rel-16 NR\_IIOT-Core

[R2-2105853](file:///C:\3GPP%20meetings\RAN2\2021\TSGR2_114-e\docs\R2-2105853.zip) Correction to 38.321 on UCI multiplexing for priorization handling ZTE, Sanechips CR Rel-16 38.321 16.4.0 1114 - F NR\_IIOT-Core

* [AT114-e][017][NR16] MAC I - UL Skipping (Apple)

Scope: Treat R2-2105780, R2-2104896, R2-2105852, R2-2105112, R2-2106442,

Determine agreeable parts, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: EOM, CR approval can be extended to short post-email discussion.

[R2-2106713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106713.zip) Report of [AT114-e][017][NR16] MAC I - UL Skipping Apple

Treated on-line

- Most UL skipping proposals need to wait for RAN1 further progress.

* Noted, taken into account

UL skipping related

[R2-2105112](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105112.zip) UL skipping and intra-UE prioritization Apple discussion Rel-16 NR\_IIOT-Core

* Noted

[R2-2105780](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105780.zip) UL Skipping Condition for LCH-basedPrioritization Samsung CR Rel-16 38.321 16.4.0 1109 - F NR\_IIOT-Core

[R2-2104896](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104896.zip) Correction on UL skipping with lch-basedPrioritization CATT CR Rel-16 38.321 16.4.0 1098 - F NR\_IIOT-Core

- CATT think these CRs are not related to the other discussions, and think this is a MAC internal fix. Think this can be agreed. Lenovo agrees

- Ericsson think this additional line was added form the start when it was not mature enough. Now it seems that not all details are settled, we can wait to do this. ZTE agree with Ericsson.

* Both Postponed

[R2-2105852](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105852.zip) Correction to 38.321 on PUSCH Skipping coupled with intra-UE multiplexing ZTE, Sanechips CR Rel-16 38.321 16.4.0 1113 - F NR\_IIOT-Core

* Not Pursued

[R2-2106442](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106442.zip) Discussion on whether to ignore an UL grant overlapped with UCI MediaTek Inc. discussion Rel-16

* Postponed
* [AT114-e][018][NR16] MAC III (Nokia)

Scope: Treat R2-2104724, R2-2105231, R2-2105865, R2-2105232, R2-2105749, R2-2106031, R2-2106321, R2-2105851, R2-2105065, R2-2105068

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A (phase 1 Monday instead)

[R2-2106694](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106694.zip) Summary of email discussion [AT114-e][018][NR16] MAC III (Nokia) Nokia

* [018] Noted, agreements taken into account below

NR-U

[R2-2104724](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104724.zip) LS on SCell activation requirements for NR-U (R4-2105699; contact: Nokia) RAN4 LS in Rel-16 NR\_unlic-Core To:RAN2

Moved here

* [018] No RAN2 impact. Noted

[R2-2105231](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105231.zip) Analysis on SCell activation/deactivation requirements for NR-U Huawei, HiSilicon discussion Rel-16 NR\_unlic-Core

* [018] No support for P2. Noted

[R2-2105865](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105865.zip) Clarification on prioritization of retransmission over initial transmission for HARQ PID selection in NR-U Nokia, Nokia Shanghai Bell CR Rel-16 38.321 16.4.0 1115 - F NR\_unlic-Core

* [018] Agreed

Secondary DRX

[R2-2105232](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105232.zip) Clarification on secondary DRX group Samsung CR Rel-16 38.321 16.4.0 1104 - F TEI16

* [018] Not pursued

eLCID

[R2-2105749](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105749.zip) Clarification on MAC PDU assembly with eLCID Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

* [018] Not pursued

[R2-2106031](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106031.zip) Clarification to transmission of padding and padding BSR with eLCID in IAB Ericsson, Apple CR Rel-16 38.321 16.4.0 1116 - F NR\_IAB-Core

* [018] Not pursued

[R2-2106321](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106321.zip) CR for not transmitting only padding and padding BSR with eLCID Samsung, Nokia, Nokia Shanghai Bell, Qualcomm, LG, ZTE, MediaTek, Intel CR Rel-16 38.321 16.4.0 1118 - F NR\_IAB-Core

* [018] Agreed

2-Step RACH

[R2-2105851](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105851.zip) Correction to 38.321 on msga-TransMax selection for 2-step RACH ZTE, Sanechips CR Rel-16 38.321 16.4.0 1112 - F NR\_2step\_RACH-Core

* [018] Agreed

Misc

[R2-2105065](file:///C:\3GPP%20meetings\RAN2\2021\TSGR2_114-e\docs\R2-2105065.zip) Correction on handling rule for CG-CG conflict vivo CR Rel-16 38.321 16.4.0 1099 - F NR\_IIOT-Core

* [018] Not pursued

[R2-2105068](file:///C:\3GPP%20meetings\RAN2\2021\TSGR2_114-e\docs\R2-2105068.zip) Clarification on reporting multiplexed CSI on PUCCH OPPO CR Rel-16 38.321 16.4.0 1101 - F NR\_UE\_pow\_sav-Core

* [018] Postponed

Withdrawn

R2-2105067 CR for secondary DRX group OPPO CR Rel-16 38.321 16.4.0 1100 - F NR\_UE\_pow\_sav-Core Withdrawn

#### 6.1.3.2 RLC

#### 6.1.3.3 PDCP

#### 6.1.3.4 SDAP

#### 6.1.3.5 BAP

* [AT114-e][019][NR16] BAP (Ericsson)

Scope: Treat R2-2105357, R2-2105875, R2-2106027, R2-2106028, R2-2106218, R2-2106219

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106028](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106028.zip) Handling of Unknown and Reserved Values in the BAP Header Ericsson, AT&T discussion NR\_IAB-Core

[R2-2106219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106219.zip) Discussion on extension principles for mixed deployment of IAB node in different releases Huawei, HiSilicon discussion Rel-16 NR\_IAB-Core

* [019] both noted

[R2-2105357](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105357.zip) Corrections on BAP Control PDU operations vivo CR Rel-16 38.340 16.4.0 0016 - F NR\_IAB-Core

* [019] revised

[R2-2105875](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105875.zip) Handling of erroneous data at BAP layer Samsung Electronics GmbH CR Rel-16 38.340 16.4.0 0017 - F NR\_IAB-Core

* [019] Merged with R2-2106027

[R2-2106027](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106027.zip) Corrections to the handling of unknown, unforeseen, and erroneous protocol data Ericsson, AT&T CR Rel-16 38.340 16.4.0 0018 - F NR\_IAB-Core

* [019] revised

[R2-2106218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106218.zip) Correction on BAP handling for the hybrid release IAB deployment Huawei (Rapporteur), HiSilicon CR Rel-16 38.340 16.4.0 0019 - F NR\_IAB-Core

* [019] Not Pursued

### 6.1.4 Control Plane corrections

#### 6.1.4.0 In principle agreed CRs

* [AT114-e][020][NR16] Control Plane IPA CRs and UE caps Misc Corrections (Intel)

Scope: Treat R2-2104887, R2-2104890, R2-2104788, R2-2104839, R2-2104904, R2-2105104, R2-2105105, R2-2105144, R2-2105184, R2-2105372, R2-2105393, R2-2105417, R2-2105422, R2-2105527, R2-2105602, R2-2105605, R2-2105624, R2-2105732, R2-2106207, R2-2106208, R2-2106284, R2-2106448,

Phase 1, For IPA CRs Confirm CRs or identify needed change. Other CRs determine agreeable parts, Phase 2, for IPA CR modifications, and new agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2104887](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104887.zip) Miscellaneous corrections to Rel-16 UE capabilities Intel Corporation CR Rel-16 38.306 16.4.0 0541 2 F LTE\_NR\_DC\_CA\_enh-Core, NR\_unlic-Core, NR\_L1enh\_URLLC-Core, NR\_pos-Core, TEI16 R2-2104553

* [020] revised

[R2-2104890](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104890.zip) UE Feature list for NR Rel-16 Intel Corporation CR Rel-16 38.822 15.0.1 0004 2 B TEI16 R2-2104554

* [020] revised

[R2-2104788](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104788.zip) Corrections to UE action upon SIB1 reception Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2475 2 F NR\_pos-Core, 5G\_V2X\_NRSL-Core R2-2104568

Moved Here

* [020] revised

[R2-2106670](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106670.zip) Corrections to UE action upon SIB1 reception Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2475 3 F NR\_pos-Core, 5G\_V2X\_NRSL-Core R2-2104568

* [020] Agreed

[R2-2105105](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105105.zip) Inter-RAT RRM measurement on NR-U Apple, Fujitsu, xiaomi, LG Electronics CR Rel-16 36.331 16.4.0 4654 - F NR\_unlic-Core

* [020] revised

[R2-2105144](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105144.zip) Correction on T321 for autonomous gap based E-UTRAN CGI reporting ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2494 1 F NR\_RRM\_enh-Core R2-2103030

* [020] revised

R2-2106672 Correction on T321 for autonomous gap based E-UTRAN CGI reporting ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2494 2 F NR\_RRM\_enh-Core R2-2103030

* [020] Agreed

[R2-2105417](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105417.zip) Correction on description of subCarrierSpacing in BWP Fujitsu,Samsung CR Rel-16 38.331 16.4.1 2561 2 F NR\_unlic-Core R2-2104604

* [020] revised

R2-2106723 Correction on description of subCarrierSpacing in BWP Fujitsu,Samsung CR Rel-16 38.331 16.4.1 2561 3 F NR\_unlic-Core R2-2104604

* [020] Agreed

[R2-2106284](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106284.zip) Correction on releasing referenceTimePreferenceReporting and sl-AssistanceConfigNR Google Inc. CR Rel-16 38.331 16.4.1 2562 1 F 5G\_V2X\_NRSL-Core, NR\_IIOT-Core R2-2104247

* [020] revised

R2-2106667 Correction on releasing referenceTimePreferenceReporting and sl-AssistanceConfigNR Google Inc. CR Rel-16 38.331 16.4.1 2562 2 F 5G\_V2X\_NRSL-Core, NR\_IIOT-Core R2-2104247

* [020] Agreed

[R2-2104839](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104839.zip) Correction on Capability of two PUCCH transmission OPPO CR Rel-16 38.306 16.4.0 0542 2 F NR\_L1enh\_URLLC-Core R2-2104569

[R2-2104904](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104904.zip) Correction on repetition for L1-SINR vivo CR Rel-16 38.331 16.4.1 2586 - F NR\_eMIMO-Core

[R2-2105104](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105104.zip) SSB-ToMeasure for NR-U Apple, Fujitsu, xiaomi, LG Electronics CR Rel-16 38.331 16.4.1 2600 - F NR\_unlic-Core

[R2-2105184](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105184.zip) Correction on failureType in FailureReportSCG-EUTRA and scgFailureInfoEUTRA Huawei, HiSilicon, Ericsson CR Rel-16 38.331 16.4.1 2540 2 F NR\_newRAT-Core, NR\_unlic-Core R2-2104543

[R2-2105372](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105372.zip) Correction on freqMonitorLocations ASUSTeK CR Rel-16 38.331 16.4.1 2508 1 F NR\_unlic-Core R2-2103449

[R2-2105393](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105393.zip) Correction on description of ssb-PositionsInBurst in ServingCellConfigCommonSIB Fujitsu CR Rel-16 38.331 16.4.1 2505 2 F NR\_unlic-Core R2-2104605

[R2-2105422](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105422.zip) Correction on RNA configuration for UE in SNPN access mode Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2626 - F NG\_RAN\_PRN-Core

[R2-2105527](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105527.zip) CR on the missing definition of Available SNPN in TS 38.304 Huawei, HiSilicon CR Rel-16 38.304 16.4.0 0206 1 F NG\_RAN\_PRN-Core R2-2103168

[R2-2105602](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105602.zip) IAB LTE changes Samsung Electronics GmbH CR Rel-16 36.331 16.4.0 4649 1 F NR\_IAB-Core R2-2104597

[R2-2105605](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105605.zip) Clarification on the initiation of RNA update Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2581 1 F NR\_newRAT-Core, TEI16 R2-2104621

[R2-2105624](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105624.zip) Clarification on the initiation of RNA update Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4651 1 F LTE\_5GCN\_connect-Core R2-2104620

[R2-2105732](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105732.zip) Clarifications on the TRP definition for positioning Xiaomi Communications CR Rel-17 38.331 16.4.1 2644 - F NR\_pos-Core

[R2-2106207](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106207.zip) Miscellaenous corrections on BH RLC channel management for IAB-MT Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2557 2 F NR\_IAB-Core R2-2104562

[R2-2106208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106208.zip) Miscellaneous corrections on F1 over LTE for IAB Huawei, HiSilicon, Samsung CR Rel-16 36.331 16.4.0 4633 2 F NR\_IAB-Core R2-2104561

[R2-2106448](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106448.zip) CR on the configuration restriction on DCI format 0\_2/1\_2 for unlicensed band (Option 1) OPPO, Samsung, Xiaomi, ZTE, Apple, Intel CR Rel-16 38.331 16.4.1 2502 1 F NR\_IIOT-Core, NR\_unlic-Core R2-2103209 Late

* [020] all 15 CRs above Agreed

#### 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).

* [AT114-e][021][NR16] RRC I (ZTE)

Scope: Treat R2-2105516, R2-2105179, R2-2104920, R2-2105925, R2-2105926, R2-2105896, R2-2105186, R2-2105421, R2-2106281, R2-2105964, R2-2105965, R2-2105394,

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

##### 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.

[R2-2106765](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106765.zip)

Misc

[R2-2105516](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105516.zip) Correction on T310 and T312 ITRI CR Rel-16 38.331 16.4.1 2630 - F NR\_newRAT-Core

* [021] Not Pursued

**SNPN**

[R2-2105179](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105179.zip) Miscellaneous Corrections to the SNPN ZTE Corporation, Sanechips, Samsung CR Rel-16 38.331 16.4.1 2605 - F NG\_RAN\_PRN-Core

R2-2106722 Miscellaneous Corrections to the SNPN ZTE Corporation, Sanechips, Samsung CR Rel-16 38.331 16.4.1 2605 1 F NG\_RAN\_PRN-Core

* [021] Agreed

URLLC

[R2-2104920](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104920.zip) Correction on reportSlotOffsetList Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2590 - F NR\_L1enh\_URLLC-Core

* [021] Agreed

NR-U

[R2-2105925](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105925.zip) Correction on description of msg1-SubcarrierSpacing in RACH-ConfigCommon ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2652 - F NR\_unlic-Core

Moved from 6.1.4.1

* [021] Agreed

R2-2106757 Correction on description of msg1-SubcarrierSpacing in RACH-ConfigCommon ZTE Corporation, Sanechips CR Rel-15 38.331 15.x.x xxxx - F NR\_unlic-Core

* [021] Agreed

[R2-2105926](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105926.zip) Correction on description of ssb-PositionsInBurst in ServingCellConfigCommon ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2653 - F NR\_unlic-Core

Moved from 6.1.4.1

* [021] Merged with Rapporteur RRC CR

[R2-2105896](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105896.zip) Extending number of cells for search space switching trigger configuration Ericsson discussion NR\_unlic-Core

* [021] Noted

[R2-2106759](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106759.zip) Capability bit for extending search space switching trigger configuration Ericsson CR Rel-16 38.306 16.4.0 2607 - F NR\_unlic-Core

* [021] Agreed

[R2-2106758](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106758.zip) Extending number of cells for search space switching trigger configuration Ericsson CR Rel-16 38.331 16.4.1 2702 - F NR\_unlic-Core

* [021] Agreed

[R2-2105186](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105186.zip) Correction on switchTriggerToAddModList-r16 and switchTriggerToReleaseList-r16 Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2607 - F NR\_unlic-Core

* [021] not pursued

##### 6.1.4.1.2 RRM and Measurements

CGI Reporting for SNPN

[R2-2105421](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105421.zip) Discussion on CGI reporting for NPN-only cell Samsung Electronics Co., Ltd discussion NG\_RAN\_PRN-Core

[R2-2106281](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106281.zip) Discussion on CGI report for NPN-only cell Huawei, CMCC, China Telecom, HiSilicon discussion Rel-16

* [021] two tdocs noted

R2-2106706

[021] Agreed

##### 6.1.4.1.3 System Information and Paging

New posSI scheduling

*Moved from 6.1*

[R2-2105964](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105964.zip) Discussion on SI start offset requirements Ericsson, Verizon discussion Rel-16 38.331 NR\_pos-Core

* Noted

[R2-2105965](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105965.zip) Correction of SI Scheduling Ericsson, Verizon CR Rel-16 38.331 16.4.1 2658 - F NR\_pos-Core

* Not Pursued

ONLINE CB on the above 2 tdocs

- Ericsson think this is a correction, would like to have this in R16.

- ZTE reports that most other companies do not want this, is a functionally NBC change.

- Ericsson thikn there is a problem, think the way the procedure is written will cause collisions, which makes utilization low. Thikn tha tissue is positioning.

- Chair 5min view: Can maybe be made BC (at cost of efficiency), is quite small/limited, But is there really a problem to resolve? Most systems doesn’t use many SI messages.

- Huawei and QC thikn it is difficult to make this BC. Thikn in next Q it is not feasible in R16, if changed it need to be changed now. Nokia also thikn this is NBC and no issue to resolve, OPPO agrees.

- Ericsson explains the benefits, think that in particular with Pos SIBs there is an issue – the amount of Si is huge - and there will be even more SIBs.

- Chair: Other companies are not convinced, there is quite massive opposition.

* Not agreed

##### 6.1.4.1.4 Inter Node RRC messages

[R2-2105394](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105394.zip) Introduction of ssb-PositionQCL-Common and ssb-PositionQCL in inter-node messages Fujitsu discussion Rel-16 NR\_unlic-Core

* [021] Not Pursued

##### 6.1.4.1.5 Other

* [AT114-e][022][NR16] RRC II (MediaTek)

Scope: Treat R2-2105069, R2-2105423, R2-2105425, R2-2105427, R2-2106338, R2-2106339, R2-2106340, R2-2106282, R2-2106283, R2-2104987, R2-2104717, R2-2105713, R2-2105714, R2-2104985, R2-2104986, R2-2105712, R2-2106115, R2-2106116, R2-2106117, R2-2106118, R2-2105645, R2-2105358, R2-2106464

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

TEI16 - MPS Redirection

Plan: Technicallly endorsed CRs for RP. CRs were almost endorsable last meeting.

[R2-2105069](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105069.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 36.331 16.4.0 4579 4 C NR\_newRAT-Core, TEI16 R2-2103042

[R2-2105423](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105423.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 38.331 16.4.1 2413 4 C NR\_newRAT-Core, TEI16 R2-2104635

[R2-2105425](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105425.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 36.306 16.4.0 1804 3 C NR\_newRAT-Core, TEI16 R2-2104636

[R2-2105427](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105427.zip) Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 38.306 16.4.0 0526 3 C NR\_newRAT-Core, TEI16 R2-2104637

* [022] 4 CRs above Revised

R2-2106747 Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 36.331 16.4.0 4579 5 C NR\_newRAT-Core, TEI16 R2-2103042

R2-2106748 Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 38.331 16.4.1 2413 5 C NR\_newRAT-Core, TEI16 R2-2104635

R2-2106749 Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 36.306 16.4.0 1804 4 C NR\_newRAT-Core, TEI16 R2-2104636

R2-2106750 Redirection with MPS Indication Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo, AT&T, Verizon CR Rel-16 38.306 16.4.0 0526 4 C NR\_newRAT-Core, TEI16 R2-2104637

* [022] 4 CRs above technically endorsed (for RP approval)

[R2-2106338](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106338.zip) Redirection with high priority access ZTE corporation, Sanechips discussion Rel-16 NR\_newRAT-Core, TEI16

* [022] Noted

[R2-2106339](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106339.zip) Redirection with high priority access-38.331 ZTE corporation, Sanechips CR Rel-16 38.331 16.4.1 2691 - C NR\_newRAT-Core, TEI16

[R2-2106340](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106340.zip) Redirection with high priority access-38.306 ZTE corporation, Sanechips CR Rel-16 38.306 16.4.0 0603 - C NR\_newRAT-Core, TEI16

[R2-2106382](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106382.zip) Redirection with high priority access-36.331 ZTE corporation, Sanechips CR Rel-16 36.331 16.4.0 4685 - C NR\_newRAT-Core, TEI16

[R2-2106383](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106383.zip) Redirection with high priority access-36.306 ZTE corporation, Sanechips CR Rel-16 36.306 16.4.0 1818 - C NR\_newRAT-Core, TEI16

* [022] 4 CRs above not pursued

TEI16 - HARQ configuration

[R2-2104987](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104987.zip) Restrictions in the number of HARQ processes Nokia, Nokia Shanghai Bell discussion Rel-16 NR\_newRAT-Core, TEI16

Moved here. Chair: a correction!

* [022] Noted, not agreed, will not introduce more granular configuration of PDSCH HARQ processes in Rel-16

**R1 TEI16 - Half-duplex operation**

[R2-2104717](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104717.zip) Reply LS on half-duplex operation (R1-2104122; contact: Huawei) RAN1 LS in Rel-16 TEI16 To:RAN2

* [022] Noted

[R2-2105713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105713.zip) CR on half-duplex operation Huawei, HiSilicon, CATT CR Rel-16 38.306 16.4.0 0590 - F TEI16

* [022] Not pursued

[R2-2105714](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105714.zip) CR on half-duplex operation Huawei, HiSilicon, CATT CR Rel-16 38.331 16.4.1 2642 - F TEI16

* [022] Not pursued

[R2-2104985](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104985.zip) Corrections to directional collision handling in half-duplex operation Nokia, Nokia Shanghai Bell CR Rel-16 38.306 16.4.0 0575 - F TEI16

* [022] revised

[R2-2104986](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104986.zip) Corrections to directional collision handling in half-duplex operation Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2596 - F TEI16

* [022] Not pursued

[R2-2105712](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105712.zip) Draft Reply LS on half-duplex operation Huawei, HiSilicon LS out Rel-16 TEI16 To:RAN1

* [022] Noted, not agreed, No need to send LS to RAN1

[R2-2106115](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106115.zip) Extension of candidateBeamRSList set to "release" MediaTek Inc., Intel Corporation discussion Rel-16

- [022] Rap: Proposal 8: RAN2 to have a post-meeting e-mail discussion on how UE shall handle the extension field of *candidateBeamRSList*. The intention is to agree a 38.331 clarification CR in next meeting. Could consider option 2 and option 3 proposed in R2-2106115 as a starting point.

* [022] Noted

[R2-2106116](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106116.zip) Handling of candidateBeamRSListExt-v1610 set to “release” (option 1) MediaTek Inc., Intel Corporation draftCR Rel-16 38.331 16.4.1 F NR\_eMIMO-Core

[R2-2106117](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106117.zip) Handling of candidateBeamRSListExt-v1610 set to “release” (option 2) MediaTek Inc., Intel Corporation draftCR Rel-16 38.331 16.4.1 F NR\_eMIMO-Core

[R2-2106118](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106118.zip) Handling of candidateBeamRSListExt-v1610 set to “release” (option 3) MediaTek Inc., Intel Corporation draftCR Rel-16 38.331 16.4.1 F NR\_eMIMO-Core

* [022] Postponed
* Long Email Discusssion: RAN2 to have a post-meeting e-mail discussion on how UE shall handle the extension field of *candidateBeamRSList*. The intention is to agree a 38.331 clarification CR in next meeting. Could consider option 2 and option 3 proposed in R2-2106115 as a starting point.

IAB

[R2-2105645](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105645.zip) Resolving ambiguity in use of BAP routing ID Samsung Electronics GmbH CR Rel-16 38.331 16.4.1 2637 - F NR\_IAB-Core

* [022] Postponed

[R2-2105358](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105358.zip) Miscellaneous corrections on IAB vivo CR Rel-16 38.331 16.4.1 2619 - F NR\_IAB-Core

* [022] revised

TEI16 – Not Treated

[R2-2106177](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106177.zip) Overheating assistance configuration for SCG in NR-DC Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2671 - F NR\_newRAT-Core, TEI16

Moved here, Chair: This seems like a new R2 TEI16 proposal, not a correction. Need stronger support for a late addition to R16. .

Withdrawn

R2-2106341 Redirection with high priority access-36.331 ZTE corporation, Sanechips CR Rel-16 38.306 16.4.0 0604 - C NR\_newRAT-Core, TEI16 Withdrawn

R2-2106342 Redirection with high priority access-36.306 ZTE corporation, Sanechips CR Rel-16 38.306 16.4.0 0605 - C NR\_newRAT-Core, TEI16 Withdrawn

#### 6.1.4.2 LTE changes

Late

[R2-2106464](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106464.zip) Discussion on compatibility issue on failure type for NR SCG failure CATT discussion

- [022] Rap: Proposal 11: Postpone the issue on unknown code point in NR SCG failure mentioned in R2-2106464. Companies are invited to check their implementation and propose solution (if needed) to next meeting.

* [022] Postponed

#### 6.1.4.3 UE capabilities

* [AT114-e][023][NR16] UE capabilities (Intel)

Scope: Treat R2-2104716, R2-2104727, R2-2104884, R2-2104885, R2-2105177, R2-2105178, R2-2105063, R2-2105094, R2-2105095, R2-2105711, R2-2104916, R2-2104917, R2-2104722, R2-2105715, R2-2105247, R2-2105716, R2-2105717, R2-2106316, R2-2104829, R2-2105359, R2-2105360, R2-2105361, R2-2105362

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

R1 R4 Feature list update

[R2-2104716](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104716.zip) LS on updated Rel-16 RAN1 UE features lists for NR after RAN1#104bis-e (R1-2104121; contact: NTT DOCOMO, AT&T) RAN1 LS in Rel-16 NR\_2step\_RACH-Core, NR\_unlic-Core, NR\_IAB-Core, 5G\_V2X\_NRSL-Core, NR\_L1enh\_URLLC-Core, NR\_IIOT-Core, NR\_eMIMO-Core, NR\_UE\_pow\_sav-Core, NR\_pos-Core, NR\_Mob\_enh-Core, LTE\_NR\_DC\_CA\_enh-Core, TEI16, NR\_CLI\_RIM-Core To:RAN2, RAN4

Moved here

* [023] noted

[R2-2104727](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104727.zip) LS on Rel-16 updated RAN4 UE features lists for LTE and NR (R4-2105855; contact: CMCC) RAN4 LS in Rel-16 To:RAN2 Cc:RAN1

Moved here

* [023] noted

[R2-2104884](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104884.zip) Release-16 UE capabilities based on RAN1 and RAN4 feature lists Intel Corporation CR Rel-16 38.306 16.4.0 0573 - F NR\_eMIMO-Core, NR\_IIOT-Core, LTE\_NR\_DC\_CA\_enh-Core, NR\_L1enh\_URLLC-Core, NR\_HST-Core, TEI16

* [023] revised

[R2-2104885](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104885.zip) Release-16 UE capabilities based on RAN1 and RAN4 feature lists Intel Corporation CR Rel-16 38.331 16.4.1 2585 - F NR\_eMIMO-Core, NR\_HST-Core, TEI16

* [023] revised

[R2-2105177](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105177.zip) CR on the Updated RAN1/4 Features -38306 ZTE Corporation, Sanechips CR Rel-16 38.306 16.4.0 0579 - F TEI16

[R2-2105178](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105178.zip) CR on the Updated RAN1/4 Features -38331 ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2606 - F TEI16

* [023] 2 CRs Not Pursued

Updated R1 R4 features

[023] Rap: On updated R1 R4 feature lists, Outcome of Phase 1: Proposal#2:Agree to pursue CRs in R2-2104884 (TS38.306 CR) and R2-2104885 (TS38.331 CR) for the R1 and R4 feature list update. Remove the HST capabilities in the CRs as it will be discussed separately. CRs in R2-2105177 (TS38.306 CR) and R2-2105178 (TS38.331 CR) are noted. Further detailed comments to the CR, if any, can be discussed in Phase 2.

R16 Feature list

- [023] Outcome of Phase 1: *Proposal#9: Agree to pursue to CR in R2-2104890. Need to take into account comments in email disc [020] and also any updates from this meeting. Further detailed comments to the CR, if any, can be discussed in Phase 2 in email disc [020].*

[R2-2105063](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105063.zip) Corrections on the Shared Spectrum Channel Access Parameters CATT CR Rel-16 38.306 16.4.0 0577 - F NR\_unlic-Core

- [023] Rap” Outcome of Phase 1: Proposal#4**:** Agree to the changes in R2-2105063 which will be merged into the update of R2-2104887. Further detailed comments, if any, can be discussed in Phase 2 in email disc [020] on update of R2-2104887

* [023] merged with R2-2104887

[R2-2105094](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105094.zip) Introduction of the intra-NR and inter-RAT HST Capabilities Apple, OPPO, CATT, Nokia, Nokia Shanghai Bell, Ericsson CR Rel-16 38.306 16.4.0 0578 - F NR\_HST-Core

[R2-2105095](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105095.zip) Introduction of the intra-NR and inter-RAT HST Capabilities and Configuration Apple, OPPO, CATT, Nokia, Nokia Shanghai Bell, Ericsson CR Rel-16 38.331 16.4.1 2599 - F NR\_HST-Core

- [023] Rap: Proposal#5 (new): Agree to pursue the CRs (R2-2105094 (38.306 CR) and R2-2105095 (38.331 CR) with the following updates. Further detailed comments to the CR, if any, can be discussed in Phase 2 No new configuration flags *Update the field description of the existing configuration flag..*

* [023] 2 CRs revised

TxD capability

[R2-2105711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105711.zip) Discussion on signalling design for TxD capability Huawei, HiSilicon discussion Rel-16 TEI16

- [023] Rap: Proposal#3: Wait for RAN4 reply LS related to release independent and pre-requisites before pursuing the CRs for introducing the TX diversity capability in RAN2 spec.

* [023] noted, topic postponed

[R2-2104916](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104916.zip) CR on 38.306 for the capability of supporting txDiversity vivo CR Rel-16 38.306 16.4.0 0574 - C TEI16

[R2-2104917](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104917.zip) CR on 38.331 for the capability of supporting txDiversity vivo CR Rel-16 38.331 16.4.1 2589 - C TEI16

* [023] both postponed

Frequency separation

[R2-2104722](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104722.zip) LS on introduction of new frequency separation classes (R4-2104402; contact: Nokia) RAN4 LS in Rel-16 NR\_RF\_FR2\_req\_enh To:RAN2

* [023] Noted

[R2-2105715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105715.zip) Discussion on introduction of new frequency separation classes Huawei, HiSilicon discussion Rel-16 TEI16

* [023] noted

[R2-2105247](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105247.zip) Adding 400 Mhz and 600 MHz frequency separation classes Ericsson, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2609 - C NR\_RF\_FR2\_req\_enh2

Moved from 6.1

- [023] Rap: Outcome of Phase 1: Proposal#7: Agree to pursue to CR in R2-2105247 (Option 2). Further detailed comments to the CR, if any, can be discussed in Phase 2.

* [023] revised

[R2-2105716](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105716.zip) CR on introduction of new frequency separation classes Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0591 - F TEI16

[R2-2105717](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105717.zip) CR on introduction of new frequency separation classes Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2643 - F TEI16

* [023] two CRs not pursued

Other R1 R4

*Moved from 7.1.2*

[R2-2106316](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106316.zip) Correction on TPMI group signaling for UL full power transmission Samsung CR Rel-16 38.306 16.4.0 0602 - F NR\_eMIMO-Core

* [023] Not pursued

[R2-2104829](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104829.zip) Left issue on two PUCCH capability OPPO discussion Rel-16 NR\_L1enh\_URLLC-Core

[023] Rap: 2 PUCCH capability: Outcome Ph1: *Proposal#1\_1:**Agree to adopt Alt3 (i.e.* relocate the sentences all into *twoHARQ-ACK-Codebook-type1-r16 as baseline*). *The change will be included into the update of R2-2104884. Further detailed comments, if any, can be discussed in Phase 2 in the update of R2-2104884.*

*-* Proposal#1\_2 Send a reply LS to RAN1 to confirm whether Alt3 (i.e. relocate the sentences all into twoHARQ-ACK-Codebook-type1-r16 as baseline) is ok with them

* [023] noted, changes incorporated in R2-2104884
* [023] Send LS to R1

[R2-2106681](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106681.zip) LS response on two PUCCH capability LS out RAN2

* [023] LS out is approved

IAB

[R2-2105359](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105359.zip) Capability of supporting one-octet eLCID in IAB vivo discussion

- [023] Rap: Outcome of Phase 1: *Proposal#6: Update the text in 4.2.15 of R2-2104887 as follow. Further detailed comments, if any, can be discussed in Phase 2 in email disc [020] on update of R2-2104887.*

* [023] Noted, one change for incporporation in R2-2104887

[R2-2105360](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105360.zip) Capability of supporting one-octet eLCID in IAB - Option A vivo CR Rel-16 38.306 16.4.0 0583 - F NR\_IAB-Core

[R2-2105361](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105361.zip) Capability of supporting one-octet eLCID in IAB - Option B vivo CR Rel-16 38.306 16.4.0 0584 - F NR\_IAB-Core

[R2-2105362](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105362.zip) Capability of supporting one-octet eLCID in IAB - Option B vivo CR Rel-16 38.331 16.4.1 2620 - F NR\_IAB-Core

* [023] 3 CRs not pursued

#### 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

* [AT114-e][024][NR16] Idle Inactive (QC)

Scope: Treat R2-2105651, R2-2106275, R2-2106291, R2-2106294, R2-2106421, R2-2106209, R2-2106210

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs.

Intended outcome: Report and Agreed CRs.

Deadline: Schedule A

[R2-2106671](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106671.zip) [AT114-e][024][NR16] Idle Inactive (QC) Qualcomm Incporporated

* [024] Noted, agreements reflected below

IFRI

[R2-2106421](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106421.zip) Discussion on IFRI-related condition LG Electronics, Samsung discussion Rel-16 NR\_newRAT-Core

* [023] Noted

[R2-2105651](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105651.zip) Clarification for IFRI handling Ericsson CR Rel-16 38.304 16.4.0 0207 - F NG\_RAN\_PRN-Core, NR\_unlic-Core

[R2-2106275](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106275.zip) Clarification of Cell Barring when SIB1 is missing Qualcomm Incorporated CR Rel-16 38.304 16.4.0 0210 - F NR\_newRAT-Core

* [023] 2 CRs Not Pursued

[R2-2106291](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106291.zip) Correction of IFRI-related conditions LG Electronics, Samsung CR Rel-16 38.304 16.4.0 0211 - F NR\_newRAT-Core

* [024] revised, change the added text “and treat such cell(s) as barred”” to “and exclude such cell(s) as candidate(s) for cell selection/reselection for 300 seconds” and removing the added “(s)” from “UE shall exclude the barred cell(s)”
* [024] “RAN2 confirms that, when SIB1 acquisition fails for a cell, the UE shall bar this cell for 300 seconds and follow MIB IFRI for selecting another cell as described in TS 38.304”.
* [024] RAN2 confirms that there is a discrepancy in the current specification (TS 38.304) regarding the handling of barring for PLMN vs SNPN and registered vs selected PLMN.

IAB

[R2-2106209](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106209.zip) Correction for TS38.304 on power class for cell selection of IAB Huawei, HiSilicon CR Rel-16 38.304 16.4.0 0209 - F NR\_IAB-Core

= [023] revised? Or postponed

* [023] Adopt Option 1 in R2-2106209 for the IAB-MT power related changes provided in RAN4 LS (R2-2008444) as a baseline. The Option adopted for TS 38.304 should also be used for TS 36.304.
* [023] send an LS to RAN4 to confirm the changes.

R2-210xxxx LS to RAN4 on power class and P-max for IAB-MT cell selection RAN2 LS out

[R2-2106210](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106210.zip) Correction for TS36.304 on power class for cell selection of IAB Huawei, HiSilicon CR Rel-16 36.304 16.3.0 0828 - F NR\_IAB-Core

* [023] Not Pursued

Version that was revised

[R2-2106294](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106294.zip) Discussion on IFRI-related condition LG Electronics, Samgsung discussion Rel-16

## 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.

[R2-2104711](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104711.zip) LS on the configuration of search spaces for scheduling SL transmissions (R1-2104063; contact: Ericsson) RAN1 LS in Rel-16 5G\_V2X\_NRSL-Core To:RAN2

[R2-2104840](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104840.zip) Correction on V2X UE capability OPPO CR Rel-16 38.306 16.4.0 0543 2 F 5G\_V2X\_NRSL-Core R2-2104460

[R2-2105587](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105587.zip) Clarification on LTE DAPS and sidelink on 36.300 Huawei, HiSilicon CR Rel-16 36.300 16.5.0 1338 1 F 5G\_V2X\_NRSL-Core R2-2104107

[R2-2105770](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105770.zip) Handling of new features and NBC changes in sidelink Ericsson discussion Rel-16 5G\_V2X\_NRSL-Core

### 6.2.2 Control plane corrections

Including control plane in-principle agreed CRs from RAN2#113bis-e. This agenda item may utilize a summary document on RRC (Huawei).

[R2-2104830](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104830.zip) Left issue on sync configuration OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2105081](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105081.zip) Correction on TS 38.331 from the latest RAN1 decisions ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2597 - F 5G\_V2X\_NRSL-Core

[R2-2105082](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105082.zip) Discussion on MCS table configuration ZTE Corporation, Sanechips discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2105298](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105298.zip) Correction on security handling for SL-SRB1 CATT CR Rel-16 38.331 16.4.1 2610 - F 5G\_V2X\_NRSL-Core

[R2-2105300](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105300.zip) Correction on SS config for scheduling SL CATT CR Rel-16 38.331 16.4.1 2611 - F 5G\_V2X\_NRSL-Core

[R2-2105301](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105301.zip) Miscellaneous corrections on TS38.331 CATT CR Rel-16 38.331 16.4.1 2612 - F 5G\_V2X\_NRSL-Core

[R2-2105346](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105346.zip) Discussion on SL-SRB1 integrity check failure handling vivo discussion

[R2-2105347](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105347.zip) CR on SL-SRB1 integrity check failure handling vivo CR Rel-16 38.331 16.4.1 2618 - F 5G\_V2X\_NRSL-Core

[R2-2105348](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105348.zip) Draft LS on SL-SRB1 integrity check failure handling vivo LS out To:SA3 Cc:CT1

[R2-2105349](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105349.zip) Clarification on priority of LTE PSSS SSSS PSBCH vivo CR Rel-16 36.331 16.4.0 4659 - F 5G\_V2X\_NRSL-Core

[R2-2105520](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105520.zip) Addition of total L2 buffer size and RLC RTT for NR SL in TS 38.306 Huawei, HiSilicon CR Rel-16 38.306 16.4.0 0547 1 F 5G\_V2X\_NRSL-Core R2-2103172

[R2-2105585](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105585.zip) Correction on TS 38.331 from the latest RAN1 decisions Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2552 2 F 5G\_V2X\_NRSL-Core R2-2104461

[R2-2105586](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105586.zip) Corrections on MCS selection Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1095 2 F 5G\_V2X\_NRSL-Core R2-2104462

[R2-2105588](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105588.zip) Miscellaneous corrections on TS 36.331 for NR V2X Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4631 2 F 5G\_V2X\_NRSL-Core R2-2104465

[R2-2105589](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105589.zip) Miscellaneous corrections on TS 38.331 for NR V2X Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2551 2 F 5G\_V2X\_NRSL-Core R2-2104464

[R2-2105590](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105590.zip) Miscellaneous corrections on TS 38.331 for NR V2X (Rapporteur CR) Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2631 - F 5G\_V2X\_NRSL-Core

[R2-2105591](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105591.zip) Miscellaneous corrections on TS 36.331 for NR V2X (Rapporteur CR) Huawei, HiSilicon CR Rel-16 36.331 16.4.0 4662 - F 5G\_V2X\_NRSL-Core

[R2-2105592](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105592.zip) Clarification on dci-FormatsSL Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2632 - F 5G\_V2X\_NRSL-Core

[R2-2105643](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105643.zip) Correction of Sidelink Configured Grant Type 1 Usage During Handover Nokia, Nokia Shanghai Bell, Samsung Electronics CR Rel-16 38.331 16.4.1 2636 - F 5G\_V2X\_NRSL-Core

[R2-2105771](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105771.zip) Configuration of search spaces for scheduling SL transmissions Ericsson CR Rel-16 38.331 16.4.1 2647 - F 5G\_V2X\_NRSL-Core

[R2-2105772](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105772.zip) Handling of sidelink configured grant during handover Ericsson CR Rel-16 38.331 16.4.1 2648 - F 5G\_V2X\_NRSL-Core

[R2-2105913](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105913.zip) Correction on sidelink configuration ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2651 - F 5G\_V2X\_NRSL-Core

### 6.2.3 User plane corrections

Including user plane in-principle agreed CRs from RAN2#113bis-e. This agenda item may utilize a summary document on MAC (LG).

[R2-2104831](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104831.zip) Left issue on PUCCH reporting OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2104832](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104832.zip) Left issue on maxTransNum OPPO discussion Rel-16 5G\_V2X\_NRSL-Core

[R2-2104833](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104833.zip) Correction on UL-SL prioritization OPPO, Apple CR Rel-16 38.321 16.4.0 1097 - F 5G\_V2X\_NRSL-Core

[R2-2104834](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104834.zip) Correction on UL-SL prioritization OPPO, Apple CR Rel-16 36.321 16.4.0 1523 - F 5G\_V2X\_NRSL-Core

[R2-2105042](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105042.zip) 38321CR on correction of SL configured grant OPPO CR Rel-16 38.321 16.4.0 1065 1 F 5G\_V2X\_NRSL-Core R2-2102731

[R2-2105043](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105043.zip) 38331 CR on correction of SL configured grant OPPO CR Rel-16 38.331 16.4.1 2477 1 F 5G\_V2X\_NRSL-Core R2-2102732

[R2-2105080](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105080.zip) Correction on SR procedur for sidelink BSR ZTE Corporation, Sanechips CR Rel-16 38.321 16.4.0 1102 - F 5G\_V2X\_NRSL-Core

[R2-2105126](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105126.zip) Correction on the usage of sl-ReselectAfter Apple, OPPO, Huawei, HiSilicon, Qualcomm Incorporated CR Rel-16 38.321 16.4.0 1103 - F 5G\_V2X\_NRSL-Core

[R2-2105276](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105276.zip) Correction on condition of setting the resource reservation interval for mode 2 SHARP Corporation discussion Rel-16 5G\_V2X\_NRSL-Core

R2-2105299 Correction on security handling for SL-SRB1 CATT CR Rel-16 38.323 16.3.0 0072 - F 5G\_V2X\_NRSL-Core Withdrawn

[R2-2105350](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105350.zip) Remaining issues on sl-MaxTransNum configuration and UE behaviour vivo discussion

[R2-2105497](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105497.zip) Correction of PQFI terminology in SDAP Ericsson CR Rel-16 37.324 16.2.0 0020 2 F 5G\_V2X\_NRSL-Core R2-2104542

[R2-2105599](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105599.zip) Clarification on setting the cast type indicator Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1105 - F 5G\_V2X\_NRSL-Core

[R2-2105633](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105633.zip) Handling of the retransmission TB without an associated SL process Huawei, HiSilicon CR Rel-16 38.321 16.4.0 1106 - F 5G\_V2X\_NRSL-Core

R2-2106213 Review Report on MAC CRs in AI 6.2.3 LG Electronics Inc. discussion Rel-16 5G\_V2X\_NRSL-Core Late

## 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).

[R2-2105044](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105044.zip) Correction to 5G support for NB-IOT positioning Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0069 3 F TEI16 R2-2104407

[R2-2105048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105048.zip) Correction to NR stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0072 2 F NR\_pos-Core R2-2104527

[R2-2105055](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105055.zip) Correction to NRPPa PDU transfer for uplink positioning Huawei, HiSilicon CR Rel-16 38.305 16.4.0 0073 - F NR\_pos-Core

[R2-2105967](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105967.zip) Addition of missing parameters for the SRS spatial information Ericsson CR Rel-16 38.305 16.4.0 0074 - F NR\_pos-Core

### 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).

[R2-2104795](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104795.zip) Corrections on the description of SRS-Config CATT CR Rel-16 38.331 16.4.1 2490 2 F NR\_pos-Core R2-2104408

[R2-2105975](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105975.zip) Correction for the positioning SI offset and clarification on mapping of posSIB to SI Ericsson, Apple CR Rel-16 38.331 16.4.1 2574 1 F NR\_pos-Core R2-2104410

### 6.3.3 LPP corrections

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

[R2-2104796](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104796.zip) Miscellaneous corrections on the field description CATT, Ericsson, ZTE CR Rel-16 37.355 16.4.0 0294 2 F NR\_pos-Core R2-2104520

[R2-2104842](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104842.zip) 37.355 Draft CR on timestamp reference in NR positioning measurement report vivo draftCR Rel-16 37.355 16.4.0 NR\_pos-Core

[R2-2105045](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105045.zip) Correction to need code for DL LPP message-R15 Huawei, HiSilicon, Lenovo CR Rel-15 37.355 15.1.0 0298 2 F NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core R2-2104524

[R2-2105046](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105046.zip) Correction to need code for DL LPP message-R16 Huawei, HiSilicon, Lenovo CR Rel-16 37.355 16.4.0 0292 3 F NR\_pos-Core, NR\_newRAT-Core, LCS\_LTE\_acc\_enh-Core R2-2104525

[R2-2105049](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105049.zip) Correction to PRS configuration Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0300 2 F NR\_pos-Core R2-2104565

[R2-2105050](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105050.zip) Correction to the uplink LPP message Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0301 2 F NR\_pos-Core R2-2104566

[R2-2105051](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105051.zip) Correction to DL-PRS capability Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0302 2 F NR\_pos-Core R2-2104567

[R2-2105054](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105054.zip) Correction to PRS-only TP Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0305 - F NR\_pos-Core

[R2-2105056](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105056.zip) Correction to NR-ARFCN of the TRP Huawei, HiSilicon CR Rel-16 37.355 16.4.0 0306 - F NR\_pos-Core

[R2-2105962](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105962.zip) Clarification on UE Signaling and measurements of DL-PRS for multiple Positioning Frequency Layers Ericsson CR Rel-16 37.355 16.4.0 0307 - F NR\_pos-Core

[R2-2105963](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105963.zip) Correction of Expected RSTD to reflect Optional Presence for Broadcast Ericsson, Fraunhofer IIS, Fraunhofer HHI CR Rel-16 37.355 16.4.0 0308 - F NR\_pos-Core

[R2-2105976](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105976.zip) LPP Layer interaction with lower layers for Positioning Frequency layer and Measurement Gap Ericsson CR Rel-16 37.355 16.4.0 0288 4 F NR\_pos-Core R2-2104575

R2-2106407 Clarification on endTransaction field Samsung discussion Rel-16 37.355 TEI14 Withdrawn

[R2-2106412](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106412.zip) Clarification on endTransaction field Samsung CR Rel-16 37.355 16.4.0 0310 - A TEI14

### 6.3.4 MAC corrections

[R2-2104797](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104797.zip) Corrections on SP Positioning SRS Activation and Deactivation MAC CE CATT CR Rel-16 38.321 16.4.0 1072 3 F NR\_pos-Core R2-2104412

[R2-2104798](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104798.zip) Corrections on the UE capability of indication on supporting the extension of Positioning SRSresourceID CATT CR Rel-16 38.306 16.4.0 0572 1 F NR\_pos-Core R2-2104417

[R2-2104799](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104799.zip) Corrections on the UE capability of indication on supporting the extension of Positioning SRSresourceID CATT CR Rel-16 38.331 16.4.1 2580 1 F NR\_pos-Core R2-2104418

[R2-2105966](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105966.zip) "View on Correction for SP Positioning SRS Activation and Deactivation MAC CE" Ericsson discussion Rel-16 38.321

## 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

### 6.4.0 In-principle agreed CRs

Including CRs that were in-principle agreed in RAN2#113bis-e (which do not count towards the Tdoc limit)

[R2-2105004](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105004.zip) Transmissions to the source that continue upon DAPS UL switching Nokia, Nokia Shanghai Bell CR Rel-16 38.300 16.5.0 0353 2 F NR\_Mob\_enh-Core R2-2104336

[R2-2105016](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105016.zip) Transmission of InDeviceCoexistence, UEAssistanceInformation, MBMSInterestIndication, or SidelinkUEInformation after conditional handover MediaTek, Ericsson CR Rel-16 36.331 16.4.0 4644 1 F LTE\_feMob-Core, 5G\_V2X\_NRSL-Core R2-2104327

[R2-2105017](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105017.zip) Transmission of UEAssistanceInformation or SidelinkUEInformationNR after conditional handover MediaTek, Ericsson, Sharp, LG Electronics, Qualcomm Incorporated CR Rel-16 38.331 16.4.1 2569 1 F LTE\_feMob-Core, 5G\_V2X\_NRSL-Core R2-2104328

[R2-2105206](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105206.zip) Full configuration for CHO Google Inc. CR Rel-16 38.331 16.4.1 2565 2 F NR\_Mob\_enh-Core R2-2104347

[R2-2105500](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105500.zip) CR on T312 handling in DAPS HO ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4627 1 F LTE\_feMob-Core R2-2104075

[R2-2105501](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105501.zip) Miscellaneous corrections to 37.340 on mobility enhancement ZTE Corporation (Rapporteur), Sanechips, Ericsson CR Rel-16 37.340 16.5.0 0262 2 F NR\_Mob\_enh-Core R2-2104339

[R2-2105502](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105502.zip) CR on configuration release in DAPS HO ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4628 2 F LTE\_feMob-Core R2-2104350

[R2-2105608](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105608.zip) Clarification on RLF detection of source Pcell Huawei, HiSilicon CR Rel-16 36.300 16.5.0 1339 1 F LTE\_feMob-Core R2-2104337

[R2-2105609](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105609.zip) Clarification on RLF detection of source Pcell Huawei, HiSilicon CR Rel-16 38.300 16.5.0 0368 1 F NR\_Mob\_enh-Core R2-2104338

[R2-2106290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106290.zip) CR on LCP of the source MAC entity Samsung Electronics Polska CR Rel-16 38.321 16.4.0 1117 - F NR\_Mob\_enh-Core

[R2-2106301](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106301.zip) CR on LCP of the source MAC entity Samsung Electronics Polska CR Rel-16 36.321 16.4.0 1525 - F NR\_Mob\_enh-Core

### 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.

Including CRs for conditional evaluation upon fallback to source cell after DAPS handover (postponed in RAN2#113bis-e, see R2-2103046 and R2-2103047).

Including CR for procedural text for section on" Inability to comply with RRCReconfiguration": (postponed in RAN2#113bis-e, see R2-2103331).

Including CR for applicable cases for failure recovery via CHO (postponed in RAN2#113bis-e, see R2-2103114 option 1).

[R2-2105003](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105003.zip) 38.331 CR: Even further revised inability to comply with conditional reconfiguration Nokia, Nokia Shanghai Bell CR Rel-16 38.331 16.4.1 2507 1 F NR\_Mob\_enh-Core R2-2103331

[R2-2105325](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105325.zip) 36.331 Correction on Failure Recovery via CHO for Inter-RAT Handover Failure CATT CR Rel-16 36.331 16.4.0 4658 - F LTE\_feMob-Core

[R2-2105326](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105326.zip) 38.331 Correction on Failure Recovery via CHO for Inter-RAT Handover Failure CATT CR Rel-16 38.331 16.4.1 2616 - F NR\_Mob\_enh-Core

[R2-2105888](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105888.zip) Conditional reconfigurations and DAPS handover Ericsson discussion NR\_Mob\_enh-Core

R2-2105889 Conditional evaluation upon fallback to source cell after DAPS handover Ericsson CR Rel-16 36.331 16.4.0 4667 - F LTE\_feMob-Core Withdrawn

R2-2105890 Conditional evaluation upon fallback to source cell after DAPS handover Ericsson CR Rel-16 38.331 16.4.1 2650 - F NR\_Mob\_enh-Core Withdrawn

[R2-2105901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105901.zip) Conditional evaluation upon fallback to source cell after DAPS handover Ericsson CR Rel-16 36.331 16.4.0 4613 1 F LTE\_feMob-Core R2-2103046

[R2-2105903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105903.zip) Conditional evaluation upon fallback to source cell after DAPS handover Ericsson CR Rel-16 38.331 16.4.1 2497 1 F NR\_Mob\_enh-Core R2-2103047

[R2-2106063](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106063.zip) Clarification regarding inability to comply with conditional reconfiguration Samsung Telecommunications CR Rel-16 38.331 16.4.1 2664 - F NR\_Mob\_enh-Core

[R2-2106153](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106153.zip) Discussion on CHO and SCG configuration Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core

[R2-2106154](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106154.zip) Discussion on MAC reset for CHO Huawei, HiSilicon discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core

### 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.

Including CR for clarifying which features can be configured together with DAPS (postponed in RAN2#113bis-e, see R2-2104330).

[R2-2104934](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104934.zip) Reconfiguration during DAPS HO Ericsson, Nokia (Rapporteur) CR Rel-16 36.300 16.5.0 1341 - F LTE\_feMob-Core

[R2-2104935](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104935.zip) Reconfiguration during DAPS HO Ericsson, Nokia (Rapporteur) CR Rel-16 38.300 16.5.0 0370 - F NR\_Mob\_enh-Core

[R2-2105005](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105005.zip) Transmissions to the source that continue upon DAPS UL switching in LTE Nokia, Nokia Shanghai Bell CR Rel-16 36.300 16.5.0 1342 - F LTE\_feMob-Core

[R2-2105207](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105207.zip) Correction to DAPS handover Google Inc. CR Rel-16 36.331 16.4.0 4655 - F LTE\_feMob-Core

[R2-2105208](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105208.zip) Correction to DAPS handover Google Inc. CR Rel-16 38.331 16.4.1 2608 - F NR\_Mob\_enh-Core

[R2-2105504](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105504.zip) CR on non-DAPS DRB handling ZTE Corporation, Sanechips CR Rel-16 38.300 16.5.0 0376 - F NR\_Mob\_enh-Core

[R2-2105505](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105505.zip) CR on non-DAPS DRB handling ZTE Corporation, Sanechips CR Rel-16 36.300 16.5.0 1343 - F LTE\_feMob-Core

[R2-2105606](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105606.zip) Clarification on non-coexistence of CHO+DAPS Huawei, HiSilicon, China Telecom discussion Rel-16 NR\_Mob\_enh-Core, LTE\_feMob-Core

[R2-2105607](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105607.zip) Correction on reference signal reconfiguration for RLM Huawei, HiSilicon CR Rel-16 38.331 16.4.1 2633 - F NR\_Mob\_enh-Core

[R2-2106138](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106138.zip) Clarification on UE configuration at DAPS fallback Samsung CR Rel-16 38.331 16.4.1 2669 - F NR\_Mob\_enh-Core

[R2-2106139](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106139.zip) Clarification on UE configuration at DAPS fallback Samsung CR Rel-16 36.331 16.4.0 4675 - F NR\_Mob\_enh-Core

[R2-2106141](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106141.zip) Correction on headerCompression field for DAPS DRB Samsung CR Rel-16 36.331 16.4.0 4676 - F NR\_Mob\_enh-Core

### 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

### 6.5.0 In-principle agreed CRs

Including CRs that were in-principle agreed in RAN2#113bis-e (which do not count towards the Tdoc limit)

[R2-2105145](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105145.zip) CR on SCG release and suspend in EN-DC ZTE Corporation, Sanechips CR Rel-16 37.340 16.5.0 0257 2 F LTE\_NR\_DC\_CA\_enh-Core R2-2104344

[R2-2105146](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105146.zip) CR on SCG release in EN-DC ZTE Corporation, Sanechips CR Rel-15 37.340 15.12.0 0263 1 F NR\_newRAT-Core R2-2104345

[R2-2105147](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105147.zip) CR on SCG release in EN-DC ZTE Corporation, Sanechips CR Rel-16 37.340 16.5.0 0264 1 A NR\_newRAT-Core R2-2104346

[R2-2106018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106018.zip) Misc corrections for Rel-16 DCCA Ericsson CR Rel-16 38.331 16.4.1 2534 2 F LTE\_NR\_DC\_CA\_enh-Core R2-2104342

[R2-2106019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106019.zip) Misc corrections for Rel-16 DCCA Ericsson CR Rel-16 36.331 16.4.0 4622 2 F LTE\_NR\_DC\_CA\_enh-Core R2-2104343

[R2-2106333](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106333.zip) Clarification on NR SCG configuration within RRC Resume MediaTek Inc. CR Rel-16 38.331 16.4.1 2543 1 F LTE\_NR\_DC\_CA\_enh-Core R2-2104044

### 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.

[R2-2105057](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105057.zip) Corrections on the capability of eutra-IdleInactiveMeasurements CATT CR Rel-16 36.306 16.4.0 1810 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2105058](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105058.zip) Corrections on the capability of direct SCG SCell activation CATT CR Rel-16 38.306 16.4.0 0576 - F LTE\_NR\_DC\_CA\_enh-Core

### 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 [Post113bis-e][222][R16 DCCA] Cell grouping for NR-DC (Nokia)

Including discussion on NR-DC power control signalling (based on received RAN1 feedback)

[R2-2104708](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104708.zip) Further Reply LS on power control for NR-DC (R1-2104018; contact: Apple, vivo) RAN1 LS in Rel-17 LTE\_NR\_DC\_CA\_enh-Core To:RAN4 Cc:RAN2

[R2-2104723](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104723.zip) Reply LS on Introduction of Cell Grouping UE capability for NR-DC (R4-2105333; contact: Qualcomm) RAN4 LS in Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN2 Cc:RAN1

[R2-2104918](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104918.zip) NR-DC cell grouping UE capability signalling Qualcomm Incorporated discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2104957](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104957.zip) Clarification reconfigurationWithSync IE reception due to fast MCG recovery OPPO CR Rel-16 38.331 16.4.1 2595 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2105025](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105025.zip) Cell grouping for NR-DC Intel Corporation discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2105141](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105141.zip) Options for future-proof NR-DC cell-grouping signaling Apple Inc discussion

[R2-2105322](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105322.zip) Correction on pdsch-HARQ-ACK-Codebook-secondaryPUCCHgroup 38 331 CATT CR Rel-16 38.331 16.4.1 2613 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2105665](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105665.zip) Summary of of [Post113bis-e][222][R16 DCCA] Cell grouping for NR-DC (Nokia) Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2105666](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105666.zip) Draft LS to RAN4 on NR DC cell grouping Nokia, Nokia Shanghai Bell LS out Rel-16 LTE\_NR\_DC\_CA\_enh-Core To:RAN4 Cc:RAN1

[R2-2105667](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105667.zip) NR DC Cell Grouping Nokia, Nokia Shanghai Bell discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2106017](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106017.zip) Cell grouping for NR-DC Ericsson discussion LTE\_NR\_DC\_CA\_enh-Core

[R2-2106022](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106022.zip) Correction on field condition for MCG recovery Ericsson CR Rel-16 38.331 16.4.1 2663 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2106062](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106062.zip) UE NR-DC cell grouping capability, future extensibility Samsung Telecommunications discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2106065](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106065.zip) Clarification on coordination of UE measurement capabilities for CHO and MDT in MRDC Samsung Telecommunications CR Rel-16 38.331 16.4.1 2665 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2106162](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106162.zip) Clarification on intra-FR2 NR-DC power control Huawei, HiSilicon discussion Rel-16 LTE\_NR\_DC\_CA\_enh

[R2-2106262](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106262.zip) Furthur discussion on FR2 NR-DC power control vivo discussion Rel-16 LTE\_NR\_DC\_CA\_enh-Core

[R2-2106263](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106263.zip) Correction on FR2 NR-DC power control parameter vivo, MediaTek Inc CR Rel-16 38.331 16.4.1 2684 - F LTE\_NR\_DC\_CA\_enh-Core

[R2-2106337](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106337.zip) Views on NR-DC cell grouping UE capability SoftBank Corp. discussion Rel-16 LTE\_NR\_DC\_enh2-Core

## 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

### 6.6.0 In-principle agreed CRs

[R2-2105996](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105996.zip) SON-MDT Changes agreed in RAN2#113-bis meeting Ericsson, Huawei CR Rel-16 36.331 16.4.0 4673 - F NR\_SON\_MDT-Core

[R2-2106007](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106007.zip) SON-MDT Changes agreed in RAN2#113-bis meeting Ericsson, Huawei CR Rel-16 38.331 16.4.1 2662 - F NR\_SON\_MDT-Core

### 6.6.1 General and stage-2 corrections

Including incoming LSs, TS 37.320 corrections

[R2-2104734](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104734.zip) LS Reply on QoS Monitoring for URLLC (S5-211350; contact: Intel) SA5 LS in Rel-16 NR\_SON\_MDT-Core To:RAN2

[R2-2105327](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105327.zip) Corrections on accessibility measurements vivo CR Rel-16 37.320 16.4.0 0108 - F NR\_SON\_MDT-Core

[R2-2105328](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105328.zip) Correction on the support for RACH Optimization solutions vivo CR Rel-16 38.300 16.5.0 0374 - F NR\_SON\_MDT-Core

[R2-2106005](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106005.zip) [Draft] Reply LS on MDT Stage 2 and Stage 3 alignment Ericsson discussion NR\_SON\_MDT-Core

[R2-2106038](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106038.zip) Handling of user contest for location reporting in SONMDT QUALCOMM Incorporated, Apple discussion Rel-16

[R2-2106064](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106064.zip) Inter-node aspects of measurements for MDT in MRDC Samsung Telecommunications discussion Rel-16 37.320 NR\_SON\_MDT-Core

### 6.6.2 TS 38.314 corrections

[R2-2105329](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105329.zip) Corrections on the range of PER and the description of D2.1 vivo CR Rel-16 38.314 16.3.0 0015 - F NR\_SON\_MDT-Core

[R2-2105998](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105998.zip) On corrections to packet loss rate measurements Ericsson CR Rel-16 38.314 16.3.0 0016 - F NR\_SON\_MDT-Core

### 6.6.3 RRC corrections

[R2-2105108](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105108.zip) Clarification on RA reporting Apple, Samsung, Ericsson CR Rel-16 38.331 16.4.1 2603 - F NR\_SON\_MDT-Core

[R2-2105330](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105330.zip) Correction on the mandatory presence of ra-InformationCommon vivo CR Rel-16 38.331 16.4.1 2617 - F NR\_SON\_MDT-Core

[R2-2105424](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105424.zip) On duplicated RPLMN checking for availability indicator in logged measurements Samsung Electronics Co., Ltd CR Rel-16 38.331 16.4.1 2627 - F NR\_SON\_MDT-Core

[R2-2105426](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105426.zip) On duplicated RPLMN checking for availability indicator in logged measurements Samsung Electronics Co., Ltd CR Rel-15 36.331 15.13.0 4660 - F NR\_SON\_MDT-Core

[R2-2105436](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105436.zip) On duplicated RPLMN checking for availability indicator in logged measurements Samsung Electronics Co., Ltd CR Rel-16 36.331 16.4.0 4661 - A NR\_SON\_MDT-Core

[R2-2105841](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105841.zip) Correction to 38331 on CEF report trigger ZTE Corporation, Sanechips CR Rel-16 38.331 16.4.1 2649 - F NR\_SON\_MDT-Core

[R2-2105842](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105842.zip) Correction to 36331 on RLF report ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4665 - F NR\_SON\_MDT-Core

[R2-2105843](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105843.zip) Correction to 36331 on T330 ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4666 - F NR\_SON\_MDT-Core

[R2-2105997](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105997.zip) On WLAN-BT configuration in reportConfigInterRAT in LTE Ericsson, Huawei CR Rel-16 36.306 16.4.0 1816 - F NR\_SON\_MDT-Core

[R2-2106000](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106000.zip) On the lack of PLMN identity check in case of OutOfCoverage event triggered logging Ericsson CR Rel-16 38.331 16.4.1 2659 - F NR\_SON\_MDT-Core

[R2-2106001](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106001.zip) On OutOfCoverage event related measurement logging Ericsson CR Rel-16 38.331 16.4.1 2660 - F NR\_SON\_MDT-Core

[R2-2106002](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106002.zip) On User Consent related aspects Ericsson discussion

[R2-2106003](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106003.zip) On WLAN-BT configuration in reportConfigInterRAT Ericsson, Huawei CR Rel-16 36.331 16.4.0 4674 - F NR\_SON\_MDT-Core

[R2-2106006](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106006.zip) Configuration of location information for CEF reporting Ericsson, NTT Docomo CR Rel-16 38.331 16.4.1 2661 - F NR\_SON\_MDT-Core

[R2-2106149](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106149.zip) Correction on the release of obtainCommonLocation Huawei, HiSilicon, Samsung CR Rel-16 38.331 16.4.1 2670 - F NR\_SON\_MDT-Core

[R2-2106150](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106150.zip) Discussion on CEF report Huawei, HiSilicon, Apple, Qualcomm Incorporated discussion Rel-16 NR\_SON\_MDT-Core

[R2-2106151](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106151.zip) Discussion on the user consent for trace reporting Huawei, HiSilicon discussion Rel-16 NR\_SON\_MDT-Core R2-2104003

[R2-2106173](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106173.zip) Configuration of location information for CEF reporting NTT DOCOMO INC. Ericsson CR Rel-16 36.331 16.4.0 4678 - F NR\_SON\_MDT-Core

# 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

[R2-2104709](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104709.zip) Reply LS on timing of neighbor cell RSS-based measurements (R1-2104033; contact: Qualcomm) RAN1 LS in Rel-16 LTE\_eMTC5-Core To:RAN4 Cc:RAN2

### 7.2.2 Connection to 5GC corrections

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

[R2-2106285](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106285.zip) Discussion on paging resources determination for eMTC ZTE Corporation, Sanechips discussion Rel-16 LTE\_eMTC5-Core

[R2-2106307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106307.zip) 36331\_(R16)\_Clarification on paging DRX cycle ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4682 - F LTE\_5GCN\_connect-Core, LTE\_eMTC5-Core

[R2-2106313](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106313.zip) 36304\_(R16)\_Correction on paging resources determination-Alt1 ZTE Corporation, Sanechips CR Rel-16 36.304 16.3.0 0829 - F LTE\_5GCN\_connect-Core, LTE\_eMTC5-Core

[R2-2106320](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106320.zip) 36304\_(R16)\_Correction on paging resources determination-Alt2 ZTE Corporation, Sanechips CR Rel-16 36.304 16.3.0 0830 - F LTE\_5GCN\_connect-Core, LTE\_eMTC5-Core

[R2-2106322](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106322.zip) 36300\_(R16)\_Clarification on paging in RRC\_INACTIVE ZTE Corporation, Sanechips CR Rel-16 36.300 16.5.0 1345 - F LTE\_5GCN\_connect-Core, LTE\_eMTC5-Core

[R2-2106326](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106326.zip) draft LS to RAN3 to clarify paging DRX cycle ZTE Corporation, Sanechips LS out Rel-16 LTE\_5GCN\_connect-Core, LTE\_eMTC5-Core To:RAN3

### 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.

[R2-2105922](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105922.zip) Clarify systemInfoUnchanged-BR also transmitted in RSS Qualcomm Incorporated CR Rel-16 36.331 16.4.0 4668 - F LTE\_eMTC5-Core

## 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.

[R2-2106214](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106214.zip) Add ack-NACK-NumRepetitions for PUR-Config-NB ZTE Corporation, Sanechips CR Rel-16 36.331 16.4.0 4679 - F NB\_IOTenh3-Core

[R2-2106277](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106277.zip) MAC clarifications for PUR ZTE Corporation, Sanechips, MediaTek Inc. CR Rel-16 36.321 16.4.0 1524 - F LTE\_eMTC5-Core, NB\_IOTenh3-Core

### 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.

### 7.4.0 In-principle agreed CRs

Including CRs that were in-principle agreed in RAN2#113bis-e

[R2-2105473](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105473.zip) Clarification to Fallback band combination definition Nokia, Nokia Shanghai Bell CR Rel-16 36.306 16.4.0 1782 5 F TEI16 R2-2104329

### 7.4.1 Other

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

## 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.

[R2-2105047](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105047.zip) Correction to LTE stage2 spec for MO-LR Huawei, HiSilicon CR Rel-16 36.305 16.2.0 0104 2 F TEI16, LCS\_LTE R2-2104526

# 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.

Running CR

[R2-2106248](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106248.zip) 38.300 Running CR for MBS in NR CMCC CR Rel-17 38.300 16.5.0 0342 4 B NR\_MBS-Core R2-2102463

- QC wonder about the last meetings status.

- Chair think we can comment also on last meeting agreements capture if needed.

* Short email discussion after meeting to capture agreements

LS in

[R2-2104710](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104710.zip) LS on G-RNTI and G-CS-RNTI for MBS (R1-2104045; contact: CMCC) RAN1 LS in Rel-17 NR\_MBS To:RAN2

* We reply, noted
* [AT114-e][038][MBS] Reply LS on G-RNTI and G-CS-RNTI for MBS (CMCC)

Scope: Capture the related agreement in a reply LS

Intended outcome: Approved LS out

Deadline: EOM

Multicast activation

[R2-2105655](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105655.zip) Open issues multicast Ericsson discussion Rel-17 NR\_MBS-Core

* Noted

[R2-2105577](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105577.zip) Support of group notification Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

Moved here

* Noted

[R2-2104758](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104758.zip) Discussion on Multicast Session Activation CATT, CBN discussion Rel-17 NR\_MBS-Core

* noted

DISCUSSION MCCH vs PCCH

For MBS supporting nodes, multicast activation by MCCH or PCCH?

- Nokia think paging is simpler, main reason that in some deployments Multicast support doesn’t need MCCH at all. And Huawei showed that UE power consumption can be lower using PCCH (same POs as unicast).

- Vivo also noted that paging seems widely supported, but think paging can be split into several subcases. Different PO etc, and think we shold not compare like this. Think MCCH is better, for PCCH think the UE may need to monitor more occasions.

- Oppo has same view as Huawei. From UE point of view it is good to decouple Mcast and Bcast. Oppo think the complexity is comparable between PCCH and MCCH. MBS paging may impact legacy UEs, which should be avoided, e.g. by MBS-specific PRNTI

- Samsung believes MCCH is simpler, and think it is likely that Bcast is widely supported. Think that paging has more latency than MCCH. MCCH is more flexible in the format

- FW support PCCH with unicast paging occasions. This brings a bit of signalling overhead but if paging load is high actually using paging brings lower load than MCCH.

- Indicative Soh: MCCH 9 PCCH 18

- MTK think the SOH if not fair as there are several flavours of PCCH solutions. CATT agrees with MTK.

- Chair think we also didn’t decide the method for MCCH change notification.

- QC think the key difference is that not all UEs are required to support Broadcast, likewise the network.

- Huawei agrees that MCCH also has some things unclear.

* Use PCCH for Multicast activation notification (also for MBS supporting nodes).

DISCUSSION PCCH: PO, ID in the paging message, RNTI ..

- Huawei: unicast PO, MBS Session ID, P-RNTI

- Intel: same as Huawei, think new P-RNTI is not preferred, need to ask R1.

- Nokia: if we have a separate P-RNTI wouldn't this would be a separate PCCH. Nokia think we should stick to last meeting that MBC session ID is the ID included. Think that we can go with unicast paging occasions as UE power consumption is low, but is ok also with separate PO.

- CMCC: think separate PO is simpler.

- Xiaomi also think separate PO is better, as the cell signalling can be lower. Proposes that MBS session ID should not be included in the legacy paging message.

- Apple support HW

- LG think unicast PO, MBS session ID, and PRNTI shall be used. Think that this method also distributes the PRACH load.

- Kyocera agrees with Huawei and assumes the legacy message can be used. Think similar to ETWS CMAS notification in LTE

- TD tech think PRNTI can be used, are ok with both exsisting PO or new PO is ok, MBS session ID. Think that UE ID can be used for non-supporting nodes, who would use unicast bearers.

- ZTE support separate PO, but acknowledges that unicast PO may have lower power consumption. Think this has impact on RAN CN interface.

- Lenovo think we can use unicast PO as baseline don’t need to take separate PO off the table yet.

- NEC think we can deprioritize separate PO.

- Chair wonders if there would be objections to agree:

1> Confirm that we convey the MBS session ID in the notification.

2> Use of unicast PO with PRNTI as the baseline

- Nokia think that we would then need to assume ETWS CMAS mechanism in order to agree to unicast PO otherwise there would be significant impact. Huawei and Xiaomi agrees with Nokia

- Ericsson has concerns of using another RNTI than PRNTI and that would impact unicast paging. But would have preferres group PO.

- QC agrees with Nokia and Ericsson, think we also need beam-sweeping rep. Agrees with Ericsson that we need touse PRNTI

- CMCC still has concerns on legacy PRNTI as this means that legacy UEs will decode the paging, but can accept this.

- BT also has concerns similar to CMCC as it may increase the power consumption of legacy UEs, not sure this is the best option.

- Intel think that only UEs that joined the Multicast session need to be paged.

For multicast activation notification (for supporting nodes):

* Confirm that we convey the MBS session ID in the notification.
* Use of paging in all (legacy) PO with PRNTI is the baseline assumption (can still discuss other variants)

[R2-2104875](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104875.zip) Group notification and RACH congestion Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2105018](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105018.zip) NR Multicast group paging aspects Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2103179

Moved here

[R2-2104940](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104940.zip) Group notification and unicast paging for MBS activation OPPO discussion Rel-17 NR\_MBS-Core

[R2-2105513](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105513.zip) Group notification for Delivery mode 1 in NR MBS Kyocera discussion Rel-17

[R2-2105669](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105669.zip) MBS group notification Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

Moved here

[R2-2105008](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105008.zip) Discussion on the remaining issues with MBS group notification Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2104947](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104947.zip) MCCH based Group Notification MediaTek Inc. discussion Rel-17

[R2-2105284](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105284.zip) Consideration on Group Notification vivo discussion Rel-17 NR\_MBS-Core

[R2-2105550](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105550.zip) Discussion on MBS session activation/reactivation Spreadtrum Communications discussion Rel-17 NR\_MBS-Core

[R2-2105730](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105730.zip) Discussion on the MBS paging for delivery mode 1 Xiaomi Communications discussion Rel-17 NR\_MBS-Core

Moved here

[R2-2105099](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105099.zip) Access Control for the MBS Service Reception Apple discussion Rel-17 NR\_MBS-Core

Moved here

Broadcast Deployment

[R2-2104821](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104821.zip) NR Broadcast deployment scenarios ZTE, Sanechips discussion Rel-17 R2-2103472

[R2-2104820](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104820.zip) draft LS about deployment scenarios of NR Broadcast ZTE, Sanechips LS out Rel-17 R2-2103471 To:SA2, RAN3

MBS Architecture UP-ish

[R2-2105756](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105756.zip) Architecture aspects for NR MBS Ericsson discussion Rel-17 NR\_MBS-Core

[R2-2105015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105015.zip) NR Multicast and Broadcast Radio Bearer Architecture aspects Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2103180

[R2-2106238](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106238.zip) Discussion on MBS L2 Structure cmcc discussion Rel-17 NR\_MBS-Core

[R2-2106282](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106282.zip) Multicast and Broadcast transport channels Huawei, CBN, HiSilicon discussion Rel-17

[R2-2106417](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106417.zip) Discussion on overall architecture of MBS traffic delivery LG Electronics Deutschland discussion Rel-17

[R2-2106009](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106009.zip) Protocol Architecture of MRB with Dynamic PTM/PTP Switch Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2105365](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105365.zip) Discussion on two delivery modes for NR MBS CHENGDU TD TECH LTD. discussion Rel-17

[R2-2105727](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105727.zip) MBS impacts on PDCP Xiaomi Communications discussion Rel-17 NR\_MBS-Core R2-2104227

MBS Architecture CP-ish

[R2-2105726](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105726.zip) Discussion on MBS support on MRDC Xiaomi Communications discussion Rel-17 NR\_MBS-Core

### 8.1.2 Connected mode UEs

#### 8.1.2.1 Reliability

Expect to decide as far as possible on which further realiability mechanisms to support in R17, i.e. at least decide the support of RLC mode(s) for PTM.

[R2-2106419](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106419.zip) Summary of A.I. 8.1.2.1 Reliability LG Electronics Deutschland discussion Rel-17 NR\_MBS-Core Late

* Noted

[R2-2105020](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105020.zip) NR Multicast PTM bearer RLC AM mode operation Qualcomm Inc, FirstNet,UIC, Kyocera, AT&T discussion Rel-17 NR\_MBS-Core R2-2103188

* Noted

[R2-2105795](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105795.zip) Way forward on UP architecture for MBS InterDigital Inc., ZTE, Sanechips, MediaTek Inc., Huawei, HiSilicon, Ericsson, LG Electronics Inc., Samsung Telecommunications, Fujitsu, Sharp, CATT, CBN, Spreadtrum Communications, Xiaomi Communications, Asia Pacific Telecom co. Ltd., OPPO, Lenovo, Motorola Mobility, Apple, Vivo, TD Tech, Chengdu TD Tech, CMCC, Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

* Noted

DISCUSSION On the Three documents above.

- QC proposed a compromise to not have any L2 reliabilty at all. This is the only thing acceptable. Nokia wonder whether this also applies to PTP RLC-AM.

- IDT think it would be strange to e.g. not reuse mobility data recovery also for PTM-PTP switch? Why have such artificial limitation?

- CMCC think Option 3 simply doesn’t fit in the arch and think that whether we go for option 2 should only depend on available time.

- FW think we have not discussed all technical points and we cannot decide based on wrong info.

- Chair: This topic has been discussed with lots of effort for a long time. Even though every detail has not been discussed on-line, companies should now be very familiar with the technical characteristics of each proposal. LG has summarized and presented the expressed technical opinions. Complexity and characteristics are somewhat different between the solutions but not sufficiently different to make a pure technical argumentation decision. We go with a majority decision to get out of the stuck situation.

- QC can only accept Non-support of RLC-AM for PTM if no other reliability function is implemented for PTM.

- Chair: The condition that is asked for is not a nice precedent. We never decide like this in the WG. It seems that the intention from the asking company is that R2 shall redo the discussion in R18, but why would the majority view have changed? This seems like stalling.

- QC agrees to compromise (no sustained objection).

* RLC-AM is not supported for PTM (for MBS R17 WI).

[R2-2104754](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104754.zip) Reliability Improvement for PTM Transmission CATT discussion Rel-17 NR\_MBS-Core

[R2-2104822](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104822.zip) Consideration on MBS reliability guarantee ZTE, Sanechips discussion Rel-17 R2-2103473

[R2-2104948](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104948.zip) Reliability Mechanism for MBS MediaTek Inc. discussion Rel-17

[R2-2104969](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104969.zip) Discussion on HARQ process for MBS data reception Asia Pacific Telecom, FGI discussion

[R2-2105028](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105028.zip) ARQ of PTM with Logical Channel Aggregation Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2105096](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105096.zip) Discussion on the MBS transmission reliabilty Apple discussion Rel-17 NR\_MBS-Core

[R2-2105265](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105265.zip) MBS Reliability Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core R2-2102945

[R2-2105370](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105370.zip) Discussion on reliability for RRC\_CONNECTED state CHENGDU TD TECH LTD. discussion Rel-17

[R2-2105373](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105373.zip) UE stay in RRC\_CONNECTED when no MBS data ongoing ASUSTeK discussion Rel-17 NR\_MBS-Core R2-2103450

[R2-2105514](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105514.zip) Consideration of possible solutions for L2 reliability in NR MBS Kyocera discussion Rel-17 R2-2103374

[R2-2105596](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105596.zip) PTP\_PTM dynamic switch NEC discussion Rel-17 NR\_MBS-Core

[R2-2105757](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105757.zip) Reliability for MBS Ericsson discussion Rel-17 NR\_MBS-Core R2-2103516

[R2-2105764](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105764.zip) Discussion on MRB Architecture Samsung discussion Rel-17

[R2-2105832](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105832.zip) Issues on MBS reliability Lenovo, Motorola Mobility discussion Rel-17

[R2-2106008](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106008.zip) L2 ARQ of PTM Transmission with Dynamic PTM/PTP Switch Futurewei, Qualcomm Inc., Intel, UIC, Kyocera discussion Rel-17 NR\_MBS-Core

[R2-2106112](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106112.zip) On RLC mode for PTM transmission SHARP Corporation discussion Rel-17 NR\_MBS-Core

[R2-2106113](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106113.zip) Support of PDCP status reporting for PTM-PTP switching SHARP Corporation discussion Rel-17 NR\_MBS-Core R2-2104088

[R2-2106205](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106205.zip) Activation/Deactivation of PTM Sharp discussion

[R2-2106239](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106239.zip) Discussion on MBS UP remaining issues cmcc discussion Rel-17 NR\_MBS-Core

[R2-2106334](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106334.zip) MBS L2 architecture for PTP-PTM switching Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2106356](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106356.zip) Activation and Deactivation of PTM/PTP leg Convida Wireless discussion Rel-17

[R2-2106365](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106365.zip) PTM Reliability Considerations Convida Wireless discussion Rel-17 R2-2103949

[R2-2106423](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106423.zip) Discussion on MBS Reliability LG Electronics Deutschland discussion Rel-17

NR\_MBS-Core

#### 8.1.2.2 Void

[R2-2105680](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105680.zip) MRB and DRB configuration Sony discussion Rel-17 NR\_MBS-Core

#### 8.1.2.3 Mobility and Service continuity

[R2-2104995](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104995.zip) Considerations on Mobility and Service Continuity Samsung discussion

[R2-2105579](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105579.zip) Service continuity during inter-cell mobility Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2105019](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105019.zip) NR Multicast Broadcast mobility enhancements with service continuity Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2100414

[R2-2104755](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104755.zip) Open Issues on Mobility with Service Continuity CATT, CBN discussion Rel-17 NR\_MBS-Core

[R2-2104823](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104823.zip) Lossless handover support for NR MBS ZTE, Sanechips discussion Rel-17 R2-2101218

[R2-2104939](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104939.zip) Service continuity for MBS OPPO discussion Rel-17 NR\_MBS-Core

[R2-2104949](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104949.zip) Mobility and Service continuity for NR Multicast MediaTek Inc. discussion Rel-17

[R2-2105009](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105009.zip) Handling MBS during UE mobility Futurewei discussion Rel-17 NR\_MBS-Core

[R2-2105097](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105097.zip) Mobility with MBS service continuity Apple discussion Rel-17 NR\_MBS-Core

[R2-2105285](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105285.zip) PTP PTM switch and service continuity vivo discussion Rel-17 NR\_MBS-Core

[R2-2105286](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105286.zip) Service Continuity for Connected UE vivo discussion Rel-17 NR\_MBS-Core

[R2-2105386](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105386.zip) Discussion on mobility with service continuity for NR MBS CHENGDU TD TECH LTD. discussion Rel-17

[R2-2105551](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105551.zip) Discussion on service continuity during mobility Spreadtrum Communications discussion Rel-17 NR\_MBS-Core

[R2-2105796](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105796.zip) PTM/PTP mode switching InterDigital discussion Rel-17 NR\_MBS-Core

[R2-2105833](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105833.zip) Connected Mode Mobility with Service Continuity Lenovo, Motorola Mobility discussion Rel-17

[R2-2106240](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106240.zip) Discussion on Mobility with Service Continuity cmcc discussion Rel-17 NR\_MBS-Core

[R2-2106335](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106335.zip) MBS service continuity in mobility Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2106345](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106345.zip) Group notification for multicast session LG Electronics Inc. discussion Rel-17 NR\_MBS-Core

[R2-2106352](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106352.zip) MBS Mobility with Service Continuity Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core R2-2100644

#### 8.1.2.4 Other

Including e.g. RAN2 aspects of group scheduling.

[R2-2106483](D:\\Documents\\3GPP\\tsg_ran\\WG2\\TSGR2_114-e\\Docs\\R2-2106483.zip" \o "D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106483.zip) Summary on MBS Group Scheduling vivo

DISUCSSION

P1 P2

- LG think that there should be full flexibility. QC agrees with LG, there may be services that aretypically delivered together. Samsung agrees.

- ZTE think that the FFS is not needed as this can only optimize for rare cases. 1-to-1 mapping is sufficient. MTK and CMCC agrees

- Xiaomi think 1-N can be left to impl.

- CATT think FFS is not needed. Nokia agrees and think that flexibility comes with a cost. Oppo agreed

P3

- Oppo wonder which WG will decide on multiple RNTIs, think we should CC to SA2.

P4

- Nokia point out that if we need to do remapping at mobility we will have a service continuity issue. Network will probabl not do this.

P5-P8

- TD tech support these proposals.

- intel think we need to clarify what is PTM transmission. Definition of PTM and PTP seems different in R1.

P9-P11

- CATT think that LCID space can be discussed when multiplexing has been discussed.

- Ericsson think we can start from the baseline, and assume with shared LCID space.

- the benefit of separate LCID could be to used fixed LCID values.

- FW think that we usually separate LCIDs anyway and don’t rely on RNTI. Huawei thik in legacy we reuse for bcast service.

- TDtech support P9 and P11. P1 prefer option 1.

- QC think is may make sense to keep them separate as they are used for a group of UEs.

- LG think we might need to use eLCID.

P12-P13

- CATT think that CRNTI can be used to transmit MTCH and think that MTCH cannot always be multiplexed together.

- Huawei think P12 P13 are for new transmissions, so there is no issue.

- TD tek support

- ZTE thkink we can replace the RNT with “session”.

P14-P17

- QC think the first three are ok. Would like to wait with the last one.

- P14: Samsung think a common DRX can be used for multiple RNTIs also. QC think we must allow separate. Xiaomi think this would be an optimization.

- Ericsson are ok with this proposals.

- P14: Nokia think that when we have PTP and PTM the DRX is configured based on the service, and we don’t need separate configuration.

- Convida agrees with P14.

* One-to-one mapping between G-RNTI and MBS session is supported in NR MBS. Other mappings FFS
* One-to-one mapping between G-CS-RNTI and MBS session is supported in NR MBS. Other mappings FFS.
* A UE can support multiple G-RNTIs/G-CS-RNTIs, It is FFS whether this depends on UE capability. Inform RAN1 of this agreement.
* Multiple MBS QoS flows corresponding to the same MBS session can be mapped to one or more than one MBS radio bearers.
* MCCH is mapped to the DL-SCH for NR MBS delivery mode 2.
* MTCH is specified for PTM transmission of NR MBS.
* MTCH is mapped to the DL-SCH.
* DTCH is reused for PTP transmission of NR MBS.
* FFS if there is a need to have specific LCID spaces for the used channels.
* Multiplexing/de-multiplexing of different logical channels associated with the same G-RNTI is supported for NR MBS.
* FFS if Multiplexing/de-multiplexing of different logical channels associated with the same G-CS-RNTI is supported for NR MBS.
* Multiplexing/de-multiplexing of different logical channels associated with the C-RNTI is supported for NR MBS.
* For NR MBS delivery mode 2, LTE SC-PTM DRX scheme is used as baseline.
* FFS whether For PTM transmission of NR MBS, DRX scheme is independent of DRX for unicast transmission, e.g. supported on a per G-RNTI basis
* FFS whether For PTP transmission, DRX operation for unicast transmission is reused.

[R2-2104756](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104756.zip) Discussion on Group Scheduling CATT discussion Rel-17 NR\_MBS-Core

[R2-2104824](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104824.zip) Discussion on Group scheduling for NR MBS ZTE, Sanechips discussion Rel-17 R2-2103475

[R2-2104876](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104876.zip) MBS MAC layer and Group scheduling aspects Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2104938](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104938.zip) Discussion on group based scheduling for MBS OPPO discussion Rel-17 NR\_MBS-Core R2-2102895

[R2-2104950](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104950.zip) RAN2 aspects of Group Scheduling for NR MBS MediaTek Inc. discussion Rel-17

[R2-2104951](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104951.zip) L1 HARQ operation for PTM transmission MediaTek Inc. discussion Rel-17

[R2-2104993](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104993.zip) Considerations on Multiplexing & Scheduling Aspects Samsung discussion

[R2-2105098](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105098.zip) MBS reception in CONNECTED state Apple discussion Rel-17 NR\_MBS-Core

[R2-2105266](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105266.zip) Miscellaneous Aspects of MBS Provisioning Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core R2-2102946

[R2-2105287](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105287.zip) Group Scheduling for MBS vivo discussion Rel-17 NR\_MBS-Core

[R2-2105310](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105310.zip) Dynamic PTM and PTP switching Shanghai Jiao Tong University discussion

[R2-2105311](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105311.zip) Group Scheduling for NR MBS Shanghai Jiao Tong University discussion

[R2-2105313](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105313.zip) Deactivation of MBS reception Shanghai Jiao Tong University discussion

[R2-2105512](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105512.zip) Consideration of dynamic PTM - PTP switching with service continuity for NR MBS Kyocera discussion Rel-17 R2-2103373

[R2-2105572](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105572.zip) RAN2 aspects of group scheduling TCL Communication Ltd. discussion

[R2-2105573](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105573.zip) Dynamic PTM PTP Switch TCL Communication Ltd. discussion

[R2-2105654](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105654.zip) Open issues group scheduling Ericsson discussion Rel-17 NR\_MBS-Core R2-2103517

[R2-2105681](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105681.zip) MBS BWP UE capability and MBS resources Sony discussion Rel-17 NR\_MBS-Core

[R2-2105765](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105765.zip) SDAP/PDCP/RLC Aspects for MBS Samsung discussion Rel-17

[R2-2105834](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105834.zip) MBS Group Scheduling Aspects Lenovo, Motorola Mobility discussion Rel-17

[R2-2106241](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106241.zip) Discussion on group scheduling for MBS cmcc discussion Rel-17 NR\_MBS-Core

[R2-2106283](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106283.zip) RAN2 aspects of group scheduling Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2106422](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106422.zip) Discussion on RAN2 aspects of group scheduling and DRX LG Electronics Deutschland discussion Rel-17 NR\_MBS-Core

* 23 tdocs above are Noted

### 8.1.3 Idle and Inactive mode UEs

* [AT114-e][039][MBS] MCCH and MCCH change notification (Huawei)

Scope: Determine whether to have multiple MCCH, whether MCCH change notification is needed, and details on the mechanism.

Intended outcome: Report

Deadline: EOM (CB if needed)

[R2-2106730](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106730.zip) Report of offline discussion: [AT114-e][039][MBS] MCCH and MCCH change notification (Huawei) Huawei

DISCUSSION

P7

- Huawei think this may be urgent due to R1 design.

- Chair think there may be different options

- Huawei think that main argument for multiple is to support multiple service with different latency.

- TDtech think it is too early to decide. Single MCCH would need multiple modification periods.

P1-P6 are agreed

* MBS specific SIB is defined to carry MCCH configuration.
* MCCH contents should include information about broadcast sessions such as G-RNTI, MBS session ID as well as scheduling information for MTCH (e.g. search space, DRX). L1 parameters that need to be included in MCCH are pending further RAN1 progress and input.
* Postpone the discussion on whether dedicated MCCH configuration is required until RAN1 makes progress on BWP/CFR for MCCH.
* Indication of an MCCH change due to modification of an ongoing session’s configuration (including session stop) is provided with an explicit notification from the network (provided that RAN1 confirms a separate bit for this purpose can be accommodated in the MCCH change notification DCI, in addition to a bit for session start notification). FFS on whether this notification can be reused for modification of other information carried by MCCH, if any.
* FFS whether the possibility of UE missing an MCCH change notification needs to be addressed or can be left to UE implementation.
* At least in case RAN1 decides to utilize RNTI other than MCCH-RNTI for MCCH change notification, MCCH change notification is sent in the first MCCH monitoring occasion of each MCCH repetition period.
* We support single MCCH (in this release)
* LS to R1 short email

[R2-2105578](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105578.zip) MBS support for delivery mode 2 Huawei, CBN, HiSilicon discussion Rel-17 NR\_MBS-Core

[R2-2105668](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105668.zip) MCCH design details Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_MBS-Core

[R2-2105653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105653.zip) Open issues broadcast Ericsson discussion Rel-17 NR\_MBS-Core R2-2103517

[R2-2104757](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104757.zip) Further Discussion on delivery mode 2 CATT, CBN discussion Rel-17 NR\_MBS-Core

[R2-2104825](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104825.zip) Idle and Inactive mode UEs support of NR MBS ZTE, Sanechips discussion Rel-17

[R2-2104937](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104937.zip) Discussion on MBS interesting indication and service continuity for delivery mode 2 OPPO discussion Rel-17 NR\_MBS-Core R2-2102894

[R2-2104984](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104984.zip) On NR MBS operation in Idle/Inactive mode Samsung discussion

[R2-2105007](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105007.zip) MCCH Configuration and messaging in MBS delivery mode 2 Futurewei discussion Rel-17 NR\_MBS-Core R2-2103152

[R2-2105013](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105013.zip) NR MBS control signalling aspects for UEs in different RRC states Qualcomm Inc discussion Rel-17 NR\_MBS-Core R2-2103178

[R2-2105288](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105288.zip) Open Issues for Delivery mode 2 vivo discussion Rel-17 NR\_MBS-Core

[R2-2105387](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105387.zip) Discussion on delivery mode 2 for NR MBS CHENGDU TD TECH LTD. discussion Rel-17

[R2-2105439](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105439.zip) Discussion on Multicast Control Channel Scheduling Configurations for Delivery Mode 2 TCL Communication Ltd. discussion Rel-17

[R2-2105511](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105511.zip) Control plane aspects for delivery mode 2 in NR MBS Kyocera discussion Rel-17 R2-2103372

[R2-2105552](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105552.zip) Discussion issues on delivery mode2 Spreadtrum Communications discussion Rel-17 NR\_MBS-Core

[R2-2105728](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105728.zip) Service continuity for delivery mode 2 Xiaomi Communications discussion Rel-17 NR\_MBS-Core R2-2104230

[R2-2105729](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105729.zip) Remaining issues of MCCH and MCCH change notification Xiaomi Communications discussion Rel-17 NR\_MBS-Core R2-2104229

[R2-2105835](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105835.zip) Discussion on Idle and Inactive mode UEs Lenovo, Motorola Mobility discussion Rel-17

[R2-2105914](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105914.zip) MBS support for RRC\_IDLE/INACTIVE Intel Corporation discussion Rel-17 NR\_MBS-Core

[R2-2106242](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106242.zip) Discussion on delivery mode 2 remaining issues cmcc discussion Rel-17 NR\_MBS-Core

[R2-2106350](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106350.zip) MBS in IDLE/INACTIVE LG Electronics Inc. discussion Rel-17 NR\_MBS-Core

[R2-2106357](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106357.zip) On NR multicast and broadcast for RRC\_IDLE/RRC\_INACTIVE UEs Convida Wireless discussion R2-2103946

[R2-2106361](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106361.zip) NR MBS Configuration Information Convida Wireless discussion Rel-17 R2-2103947

[R2-2106114](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106114.zip) L2 architecture for delivery mode 2 SHARP Corporation discussion Rel-17 NR\_MBS-Core R2-2104089

[R2-2104936](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104936.zip) Discussion on beam sweeping transmission for delivery mode 2 OPPO discussion Rel-17 NR\_MBS-Core R2-2102893

[R2-2105366](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105366.zip) Performance improvement for delivery mode 2 TD TECH LTD. discussion Rel-17

Moved here

## 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).

[R2-2105062](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105062.zip) TS 37.340 CR for CPA and inter-SN CPC CATT draftCR Rel-17 37.340 16.5.0 B LTE\_NR\_DC\_enh2-Core

[R2-2105986](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105986.zip) Making progress on further MRDC enhancements Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

### 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 will not be treated in this meeting.

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

[R2-2105279](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105279.zip) Discussion on deactivation of SCG China Telecom Corporation Ltd. Discussion

[R2-2105797](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105797.zip) Activation and Deactivation of SCG InterDigital discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106039](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106039.zip) Comparison of SCG deactivation solutions Convida Wireless other Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106106](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106106.zip) Deactivation of SCG LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106140](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106140.zip) DC power sharing for deactivated SCG Samsung discussion Rel-17 LTE\_NR\_DC\_enh2-Core

R2-2105453 UE initiated SCG deactivation NTT DOCOMO INC. discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

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

This agenda item will be deprioritized in this meeting.

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

[R2-2104941](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104941.zip) Summary of AI 8.2.2.2 UE measurements and reporting in deactivated SCG OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2104316

[R2-2104942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104942.zip) UE measurements and reporting in deactivated SCG OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2102897

[R2-2104944](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104944.zip) Considerations on Considerations on UE measurements and reporting in deactivated SCG KDDI Corporation discussion

[R2-2105011](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105011.zip) RRM and RLM/RLF handling for deactivated SCG Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105059](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105059.zip) UE Behavior in Deactivated SCG CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103107

[R2-2105064](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105064.zip) Mobility for deactivated SCG NTT DOCOMO INC. discussion Rel-17

[R2-2105139](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105139.zip) TA Maintenance and other UE actions in SCG deactivated state Apple Inc discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103885

[R2-2105158](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105158.zip) Discussion on UE behaviour when SCG is deactivated ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103036

[R2-2105628](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105628.zip) UE behavior when SCG is deactivated vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105791](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105791.zip) Further considerations on SCG deactivation NEC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105798](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105798.zip) Measurements and maintenance of UL synch with a deactivated SCG InterDigital discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105829](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105829.zip) UE behaviour in deactivated SCG Lenovo, Motorola Mobility discussion Rel-17

[R2-2105987](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105987.zip) UE behaviour while the SCG is deactivated Huawei, HiSilicon other Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106023](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106023.zip) Efficient SCG (de)activation Ericsson discussion LTE\_NR\_DC\_enh2-Core

[R2-2106107](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106107.zip) UE Measurement Aspects in SCG Deactivation LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103569

[R2-2106287](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106287.zip) Discussion for UE behaviour in deactivated SCG SHARP Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2104124

[R2-2106336](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106336.zip) UE behavior during SCG deactivation MediaTek Inc. discussion LTE\_NR\_DC\_enh2-Core R2-2104160

R2-2105441 UE behaviour in deactivated SCG NTT DOCOMO INC. discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

#### 8.2.2.3 Activation of deactivated SCG

This agenda item will not be treated in this meeting.

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?

[R2-2105010](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105010.zip) Discussion on random access in SCG fast activation Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103153

[R2-2105140](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105140.zip) UE initiation of SCG re-activation request Apple Inc discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103886

[R2-2105548](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105548.zip) Discussion on UE behaviour when SCG is deactivated Spreadtrum Communications discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106058](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106058.zip) Remaining aspects concerning SCG activation procedure Samsung Telecommunications discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106108](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106108.zip) Activation of SCG LG Electronics discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103570

[R2-2106258](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106258.zip) Discussions on activation of deactivated SCG CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106312](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106312.zip) Discussion on SCG activation SHARP Corporation discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2104170

R2-2105440 Activation of deactivated SCG NTT DOCOMO INC. discussion Rel-17 LTE\_NR\_DC\_enh2-Core Late

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

This agenda item will be deprioritized during this meeting .

[R2-2104943](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104943.zip) Discussion on TRS activation for fast SCell activation OPPO discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2106259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106259.zip) Considerations for fast MCG link recovery with deactivated SCG CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

### 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 T-SN can add PSCell not proposed by S-SN.

[R2-2104996](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104996.zip) SN-initiated Conditional PSCell Change – clarifications Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104997](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104997.zip) On CPAC Procedures and Further Functionalities Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2104998](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104998.zip) Discussion on RAN3 LS on CPAC Nokia, Nokia Shanghai Bell discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105012.zip) Discussion on the procedure of SN initiated CPC Futurewei discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2103155

[R2-2105060](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105060.zip) Discussion on the remaining issues for SN initiated inter-SN CPC CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105061](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105061.zip) Discussion on the inter-node message design CATT discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105202](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105202.zip) Remaining issues for source SN configuration update China Telecommunication discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105260](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105260.zip) CPAC procedures from network perspective Qualcomm Incorporated discussion Rel-17

[R2-2105506](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105506.zip) Further consideration on CPAC ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105519](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105519.zip) Procedures in CPAC and conventional PSCell change ITRI discussion LTE\_NR\_DC\_enh2-Core R2-2103354

[R2-2105792](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105792.zip) Signaling aspects for SN-initiated CPC NEC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105830](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105830.zip) Discussion on CPAC procedures Lenovo, Motorola Mobility discussion Rel-17

[R2-2105897](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105897.zip) Conditional PSCell Addition Change Ericsson discussion LTE\_NR\_DC\_enh2-Core

[R2-2105988](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105988.zip) Inter-node message design (with draft reply LS to RAN3) Huawei, HiSilicon other Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105989](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105989.zip) Source SN configuration update at or after SN-initiated CPC Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core Revised

R2-2106436 Source SN configuration update at or after SN-initiated CPC Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core [R2-2105989](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105989.zip) Late

[R2-2106059](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106059.zip) CPAC stage 2 flow, progressing remaining issues Samsung Telecommunications discussion Rel-17 LTE\_NR\_DC\_enh2-Core

#### 8.2.3.2 CPAC procedures from UE perspective

Including discussion on UE measurements for CPAC purposes.

Including discussion on signalling towards UE.

[R2-2104914](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104914.zip) Discussion on the configuration of CPAC vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105111](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105111.zip) Details in conditional PSCell change and addition Apple discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105261](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105261.zip) CPAC procedures from UE perspective Qualcomm Incorporated discussion Rel-17

[R2-2105507](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105507.zip) Further discussion on CPAC ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105898](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105898.zip) UE procedures and signalling for CPAC Ericsson discussion LTE\_NR\_DC\_enh2-Core

[R2-2105990](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105990.zip) Uu RRC message design in CPAC Huawei, HiSilicon discussion Rel-17 LTE\_NR\_DC\_enh2-Core

#### 8.2.3.3 Other CPAC aspects

This agenda item may be deprioritized in this meeting.

Including discussion on CPAC failure handling.

Including discussion on CPAC co-existence with CHO.

[R2-2104915](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104915.zip) Discussion on CAPC simultaneous with CHO vivo discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105262](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105262.zip) Other CPAC aspects Qualcomm Incorporated discussion Rel-17

[R2-2105444](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105444.zip) Failure handling of Conditional PSCell Addition DENSO CORPORATION discussion Rel-17 LTE\_NR\_DC\_enh2-Core R2-2102950

[R2-2105518](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105518.zip) SCG RLF recovery in case CPC is configured ITRI discussion LTE\_NR\_DC\_enh2-Core R2-2103355

[R2-2105799](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105799.zip) Coexistence of CHO and CPC InterDigital, Nokia, Nokia Shanghai Bell, ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_DC\_enh2-Core

[R2-2105831](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105831.zip) Miscellaneous issues on CPAC Lenovo, Motorola Mobility discussion Rel-17

[R2-2106260](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106260.zip) Combination of CPAC and CHO CMCC discussion Rel-17 LTE\_NR\_DC\_enh2-Core

## 8.3 Multi SIM

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

Time budget: 0.5 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

Including discussion on whether UE assistance information is needed for paging collision avoidance

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

[R2-2104764](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104764.zip) Paging Collision Avoidance OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2104970](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104970.zip) Paging collision avoidance for MUSIM device Asia Pacific Telecom, FGI discussion

[R2-2104991](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104991.zip) On Paging Collision Avoidance Solution Samsung discussion

[R2-2105075](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105075.zip) Definition and solution for paging collision, RRC Inactive, SI change Lenovo, Motorola Mobility discussion LTE\_NR\_MUSIM-Core

[R2-2105084](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105084.zip) MUSIM Page Collision Avoidance Apple discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105164](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105164.zip) Consideration on the Paging Collision ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105194](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105194.zip) Further Consideration on Paging Collision Avoidance CATT discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105227](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105227.zip) RAN Impacts for paging collision avoidance solutions for Multi-SIM Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2105258](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105258.zip) Options for paging collision avoidance Qualcomm Incorporated discussion

[R2-2105269](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105269.zip) Paging Collision avoidance vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105374](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105374.zip) UE indication of paging collision for Multi-SIM ASUSTeK discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105682](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105682.zip) Discussion on paging collision avoidance in Multi-SIM Sony discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105899](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105899.zip) Paging Collision Avoidance for Multi-SIM Charter Communications, Inc discussion

[R2-2105917](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105917.zip) Paging Collision Avoidance Open Issues Huawei, HiSilicon discussion Rel-17

[R2-2105978](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105978.zip) Paging collision avoidance Ericsson discussion

[R2-2106101](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106101.zip) 36.304 change for SA2 agreed NAS based IMSI offset signaling in EPS Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2106102](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106102.zip) 5G-S-TMSI re-assignment is “enough” for paging collision avoidance in 5GS Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2106109](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106109.zip) Considerations on Paging Collision LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2103572

[R2-2106343](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106343.zip) Paging collision avoidance for MUSIM device MediaTek Inc. discussion LTE\_NR\_MUSIM-Core R2-2104151

[R2-2106398](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106398.zip) Discussion of the paging collision problem in 5GS Xiaomi Communications discussion

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

Including discussion on whether we use AS or NAS signalling for the network switching for MUSIM purpose

Including discussion on whether we can have one unified mechanism for all network switching cases (and e.g. which messages are required in which case)

[R2-2104765](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104765.zip) UE Notification on Network Switching for Multi-SIM OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105085](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105085.zip) MUSIM Network Switching Apple discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105165](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105165.zip) Consideration on the Switching Notification Procedure ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105195](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105195.zip) Further Consideration on Network Switching CATT discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105196](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105196.zip) Analysis on UE switching without leaving RRC\_CONNECTED state China Telecommunications discussion

[R2-2105201](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105201.zip) Network switching consideration of Multi-SIM China Telecommunication discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105226](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105226.zip) Scenarios and Requirements for switching notification procedure Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2105257](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105257.zip) Network switching procedures for Multi-SIM Qualcomm Incorporated discussion

[R2-2105270](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105270.zip) Open Issues on Switching Notification vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105375](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105375.zip) MUSIM Release Assistance Info for network switching ASUSTeK discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2103452

[R2-2105437](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105437.zip) Open issues on network switching for Multi-USIM devices Samsung Electronics Co., Ltd discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105442](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105442.zip) Signalling design on short time switching procedure DENSO CORPORATION discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2102940

[R2-2105445](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105445.zip) Procedures for MSIM UE notification on network switching Futurewei Technologies discussion R2-2103957

[R2-2105449](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105449.zip) UE notification procedure for short time switching NEC discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105450](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105450.zip) Open issues on network switching procedures DENSO CORPORATION discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105683](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105683.zip) Discussion on Busy Indication in Inactive State Sony discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105684](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105684.zip) Discussion on Leaving in MultiSIM Sony discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105719](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105719.zip) On coordinated switch from NW for MUSIM device Huawei, HiSilicon discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105823](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105823.zip) Switching notification and busy indication Lenovo, Motorola Mobility discussion Rel-17

[R2-2105900](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105900.zip) Network Switching Solutions for Multi-SIM Charter Communications, Inc discussion

[R2-2105977](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105977.zip) Discussion on switching mechanisms for a Multi-USIM device Ericsson discussion

[R2-2106110](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106110.zip) Considerations on SIM Swithcing LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2103573

[R2-2106212](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106212.zip) RRC based Switching Notification for leaving RRC\_CONNECTED Sharp discussion

[R2-2106215](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106215.zip) RNAU Handling in MUSIM Sharp discussion

[R2-2106351](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106351.zip) Network switching behavior for MUSIM device MediaTek Inc. discussion LTE\_NR\_MUSIM-Core R2-2104154

[R2-2106399](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106399.zip) Discussion of the UE notification on network switching for multi-SIM Xiaomi Communications discussion

[R2-2105086](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105086.zip) MUSIM Band Conflict and RRC Processing Delay Requirements Apple discussion Rel-17 LTE\_NR\_MUSIM-Core

### 8.3.4 Paging with service indication

This agenda item may be deprioritized in this meeting.

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

Including

[R2-2104766](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104766.zip) Paging with Service Indication OPPO discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105163](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105163.zip) Further analysis on introduction of paging cause China Telecommunications discussion Rel-17

[R2-2105166](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105166.zip) Consideration on the Service Indication ZTE Corporation, Sanechips discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105228](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105228.zip) On Service type indication in Paging for EPS And RAN impacts of NAS-BUSY-Indication for RRC-INACTIVE Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2105259](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105259.zip) Paging Prioritization for MUSIM Qualcomm Incorporated discussion

[R2-2105271](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105271.zip) Including Paging Cause in Paging Message vivo discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105420](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105420.zip) Discussion on support of paging cause for Multi-USIM devices Samsung Electronics Co., Ltd discussion LTE\_NR\_MUSIM-Core

[R2-2105451](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105451.zip) Discussion on paging service indication for MUSIM Futurewei Technologies discussion R2-2103958

[R2-2105541](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105541.zip) Discussion on the transmission of paging cause Spreadtrum Communications discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105542](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105542.zip) Supporting of Paging Cause Solution detection Spreadtrum Communications discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2105921](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105921.zip) Discussion on the paging with service indication Huawei, HiSilicon discussion Rel-17

[R2-2105979](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105979.zip) Introduction of a Paging cause indication Ericsson discussion

[R2-2106103](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106103.zip) Solution analysis for supporting Multi-SIM paging cause Intel Corporation discussion Rel-17 LTE\_NR\_MUSIM-Core

[R2-2106111](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106111.zip) Support of Paging Cause LG Electronics discussion Rel-17 LTE\_NR\_MUSIM-Core R2-2103574

[R2-2106353](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106353.zip) Paging with service indication MediaTek Inc. discussion LTE\_NR\_MUSIM-Core R2-2104158

[R2-2106401](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106401.zip) Detailed methods of the paging cause support for MUSIM Xiaomi Communications discussion

## 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.

[R2-2104858](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104858.zip) Updated Rel-17 IAB Workplan Qualcomm Incorporated, Samsung (WI rapporteurs) Work Plan Rel-17 NR\_IAB\_enh R2-2103080

- QC didn't recive any comments.

- R3 dep on topology adaptation, covered by P18 Nok

* Noted

[R2-2105121](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105121.zip) UE L2 Re-ordering Buffer Size Concerns with eIAB Topologies Apple discussion Rel-17 NR\_IAB\_enh-Core

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

[R2-2104860](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104860.zip) Fairness and multi-hop latency in IAB topology Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh

[R2-2104778](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104778.zip) Enhancement of multi-hop latency and congestion mitigation CATT discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104877](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104877.zip) IAB topology-wide fairness, latency and congestion enhancement Intel Corporation discussion Rel-17 NR\_IAB\_enh

[R2-2104975](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104975.zip) Discussion on fairness, multi-hop latency and congestion mitigation ZTE, Sanechips discussion Rel-17

[R2-2105122](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105122.zip) Latency mitigation in eIAB networks using timing and PDB information Apple discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105272](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105272.zip) Discussion on multi-hop latency and LCG extension issues vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105395](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105395.zip) Consideration on multi-hop latency in IAB Fujitsu discussion Rel-17 NR\_IAB\_enh-Core R2-2103283

[R2-2105452](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105452.zip) Rel. 17 IAB enhancements for fairness, multi-hop latency reduction, and congestion mitigation Futurewei Technologies discussion R2-2103987

[R2-2105509](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105509.zip) Possible solutions for topology-wide fairness, multi-hop latency and congestion mitigation in eIAB Kyocera discussion Rel-17 R2-2103370

[R2-2105517](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105517.zip) An elaboration of required PDB for multi-hop latency ITRI discussion NR\_IAB\_enh-Core R2-2103353

[R2-2105685](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105685.zip) Link quality report and number of hops information to improve topology-wide fairness and latency Sony discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105686](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105686.zip) Local reouting and cost factor to mitigate congestion Sony discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105800](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105800.zip) Timing information for latency enforcement in multi-hop IAB Interdigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105801](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105801.zip) Latency enforcement, fairness and congestion mitigation in multi-hop IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105845](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105845.zip) Fairness, latency and congestion – solutions to identified issues Samsung Electronics GmbH discussion

[R2-2105846](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105846.zip) Enhancements to LCG space and BSR triggering including pre-emptive BSR Samsung Electronics GmbH discussion

[R2-2105876](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105876.zip) Fairness, latency, congestion Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core

[R2-2106032](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106032.zip) On Topology-wide Fairness, Multi-hop Latency, and Congestion in IAB Network Ericsson discussion NR\_IAB\_enh-Core

[R2-2106221](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106221.zip) Enhancements for topology-wide fairness, multi-hop latency and congestion mitigation Huawei, HiSilicon discussion Rel-17 NR\_IAB-Core

[R2-2106303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106303.zip) Discussion on local rerouting based on HbH flow control indication ETRI discussion

[R2-2106366](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106366.zip) Discussion on identified issues for topology-wide fairness, multi-hop latency and congestion mitigation LG Electronics Inc. discussion Rel-17 NR\_IAB\_enh-Core

[R2-2106372](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106372.zip) Discussion on FFS for local re-routing, LCG extension, and CP-UP separation LG Electronics Inc. discussion Rel-17 NR\_IAB\_enh-Core

### 8.4.3 Topology adaptation enhancements

[R2-2106485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106485.zip) Summary of 8.4.3: Topology Adaptation Enhancements Nokia, Nokia Shanghai Bell

DISCUSSION

P1

- Nokia explains that DAPS is dependent on R1 e.g. for UL transmissions.

- Chair: proposals on CHO and DAPS were not discussed.

P18

- QC explains that inter-topology rerouting is rounting from one CU controlled topology to another CU controlles topology. think we need to come back to R3. Suggest to agree to option 4. Ericsson agrees that we can agree to option 4. Nokia support Option 4.

- LG think this is ongong in R3. For option 5 is based on IP address, whether it works e.g. due to IPsec need to be addressed by R3. QC think there is no issue.

- Huawei think that if R2 agrees to Option 4, we’d stop the R3 discussions. Think outer IP can be used for option 5.

- Huawei think that routing ID based re-routing is not good as it may not support different paths in the target topology. QC think the BAP address setting is topology specific and is completely flexible.

- ZTE prefer option 3a. Option 4 is slightly better than option 5 as there is less impact

- Samsung agrees that O4 and O5 are on the table, think O5 is a too major change.

- QC think we should select Option 4 based on majority view. Samsung and LG agrees.

- Vivo think O4 is less impacting, prefer this, and is in R2 scope.

- Huawei think we should wait a few days. Wait for RAN3. CATT also think we can wait.

P17

- Samsung think inter-topology and inter-donor-CU is the same.

- Huawei think the purpose is to use the same method for inter-donor-DU-rerouting (same CU). LG agrees and think it is ok.

- Intel think that inter-donor-CU local rerouting doesn’t work, cannot be “local”

- QC think there is confusion on re-routing and other cases.

P16

- Ericsson explains that flow control feedback is for Dstream traffic but RLF indication is based on UP-stream problems. Can be separated into two cases. LG agrees. Samsung are ok with this. ZTE agrees

- LG think p15 is important.

- Intel think majority of companies want hbh flow control also for UL traffic, and think it can be extended. Samsung think there is no majority for such flow control but would be ok to have it .

- Vivo think ok to appy to UL stream, support UL fc

- QC think we have agreed that for each routing ID there is only one entry. Think it would require a priority. Samsung think a routing ID and a path uniquely identifies a path uniquely.

- ZTE think we can agree if we remove the brackets.

- LG think we discussed UL hbh FC as this was clearly deprioritized ealier and think it sould not be introduced only for rerouting

- LG think the wording is not clear. For R16 the available buffer size is already there. Ericsson agrees, this was down-prioritized.

- Huawei think UL FC can be supported quite easily, cannot support fine granularity FC with current function.

- Ericsson think that the value of available buffer size should be configured.

- P16.2 already agreed that Local rerouting based on BH RLF is allowed (type 4/type-2?). ZTE think we agreed based on type-4. Samsung clearly recall type 2 was mentioned ..

P15

- Huawei think routing ID shall be identical.

P19-21

- Vivo intel LG QC support

- Apple think we should sent LS

P9

- Ericsson would like to understand better. Would create a storm of reestablishments.

P12

- LG think this is contrriversial

* RAN2 preference is to support inter-topology routing via BAP header rewriting based on BAP routing ID option 4
* Assume that the IAB-donor will configure (alternative) egress links that can be used at local re-routing (at least with same destination, FFS same routing ID)
* Local re-routing based on flow control feedback is allowed based on certain value of available buffer size. FFS further details. (Current hbh fc is for DL traffic.
* NR *DLInformationTransfer* and *ULInformationTransfer* messages can be enhanced to transfer F1-C related packets in CP/UP separation.
* A new IE named *DedicatedInfoF1c* can be defined to transfer F1-C related packets via NR RRC message
* F1-C over RRC and F1-C over BAP should not be supported simultaneously on the same parent link.
* The trigger to generate a type 2 RLF indication is at RLF detection. FFS whether for both: single and dual connection cases.
* The trigger for type 3 RLF indication transmission is successful recovery after BH RLF. FFS whether for both: single and dual connection cases.
* Type 2 and Type 3 BH RLF Indications are transmitted via BAP Control PDU.

Send LS (email discussion) (Nokia)

* [AT114-e][037][eIAB] LS to RAN3 (Nokia)

Scope: LS to RAN3 on R2 progress, explicit replies to RAN3 ls on topology adapt.

Intended outcome: Approved LS out (we don't come back on-line)

Deadline: Deadline for comments Tuesday May 25

[R2-2106707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106707.zip) LS on Topology Adaptation enhancements RAN2 LS out

* [037] Approved

[R2-2104779](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104779.zip) Inter-donor Topology Adaptation CATT discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104780](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104780.zip) CHO and DAPS-like CATT discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104781](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104781.zip) RLF Indication and Local Rerouting CATT discussion Rel-17 NR\_IAB\_enh-Core

[R2-2104859](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104859.zip) Inter-topology BAP routing Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh

[R2-2104861](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104861.zip) Enhancements to local rerouting and RLF indication in IAB Qualcomm Incorporated discussion Rel-17 NR\_IAB\_enh

[R2-2104878](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104878.zip) Intra-donor CHO enhancement for IAB Intel Corporation discussion Rel-17 NR\_IAB\_enh

[R2-2104879](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104879.zip) dual-parent IAB-node topology adaptation enhancement Intel Corporation discussion Rel-17 NR\_IAB\_enh

[R2-2104880](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104880.zip) RLF indication enhancement and DAPS for single connected IAB-node Intel Corporation discussion Rel-17 NR\_IAB\_enh

[R2-2104972](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104972.zip) Discussion on RLF indication and local re-routing ZTE, Sanechips discussion Rel-17

[R2-2104973](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104973.zip) Discussion on CP-UP separation and topology redundancy ZTE, Sanechips discussion Rel-17

[R2-2104974](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104974.zip) Discussion on CHO and DAPS support in IAB ZTE, Sanechips discussion Rel-17

[R2-2105123](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105123.zip) Migration and RLF handling in eIAB Networks Apple discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105273](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105273.zip) Discussion on DAPS-like solution and CHO triggers vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105274](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105274.zip) Miscellaneous issues on topology adaptation vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105275](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105275.zip) On BAP routing of intra-CU local rerouting and inter-donor DC vivo discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105376](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105376.zip) Handling Type-2 & Type-3 RLF indication ASUSTeK discussion Rel-17 NR\_IAB\_enh-Core R2-2103453

[R2-2105396](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105396.zip) Conditional HO for RLF recovery Fujitsu discussion Rel-17 NR\_IAB\_enh-Core R2-2103284

[R2-2105397](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105397.zip) Discussion on the inter-donor topology redundancy Fujitsu discussion Rel-17 NR\_IAB\_enh-Core R2-2103285

[R2-2105398](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105398.zip) Discussion on local rerouting Fujitsu discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105454](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105454.zip) RAN2 impacts of Rel.17 IAB topology adaptation enhancements Futurewei Technologies discussion R2-2104152

[R2-2105481](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105481.zip) Multi-parent options Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core R2-2103559

[R2-2105482](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105482.zip) Re-routing ehnancements and RLF indications in IAB Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core R2-2103560

[R2-2105483](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105483.zip) Inter-donor-DU rerouting Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IAB\_enh-Core R2-2103561

[R2-2105510](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105510.zip) Details of topology adaptation enhancements for eIAB Kyocera discussion Rel-17 R2-2103371

[R2-2105594](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105594.zip) DAPS-like handover and NR DC for IAB NEC discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105595](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105595.zip) CHO for IAB NEC discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105687](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105687.zip) Topology adaptation enhancements in IAB Sony discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105688](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105688.zip) Dual-protocol-stack solution in IAB Sony discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105782](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105782.zip) Topology adaptation enhancements Samsung Electronics GmbH discussion

[R2-2105784](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105784.zip) New triggers for local rerouting Samsung Electronics GmbH discussion

[R2-2105802](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105802.zip) CHO triggering in IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105803](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105803.zip) DAPS support in IAB InterDigital discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105815](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105815.zip) Discussion on IAB packet rerouting Lenovo, Motorola Mobility discussion Rel-17

[R2-2105816](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105816.zip) CHO in IAB system Lenovo, Motorola Mobility discussion Rel-17

[R2-2105848](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105848.zip) Discussion on inter-donor DU local re-routing CANON Research Centre France discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105861](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105861.zip) Discussion on Inter-donor topology redundancy CANON Research Centre France discussion Rel-17 NR\_IAB\_enh-Core

[R2-2105864](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105864.zip) Discussion on RLF indication and local rerouting enhancements CANON Research Centre France discussion Rel-17 NR\_IAB\_enh-Core

[R2-2106029](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106029.zip) On IAB Inter-donor Topology Adaptation Ericsson discussion NR\_IAB\_enh-Core

[R2-2106030](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106030.zip) On CHO and DAPS for IAB Ericsson discussion NR\_IAB\_enh-Core

[R2-2106033](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106033.zip) Remaining Issues Related to CP/UP Separation in IAB Network Ericsson discussion NR\_IAB\_enh-Core

[R2-2106278](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106278.zip) Inter-donor-DU rerouting and local rerouting for R17-IAB Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2106279](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106279.zip) Running CR of TS 38.340 for eIAB Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2106280](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106280.zip) Inter-donor topology routing, F1 over NR access link and CHO Huawei, HiSilicon discussion Rel-17 NR\_IAB\_enh-Core

[R2-2106298](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106298.zip) CHO and DAPS-like Solution for eIAB LG Electronics discussion Rel-17

[R2-2106299](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106299.zip) Resolving issues on BH RLF LG Electronics discussion Rel-17

DISCUSSION

P1, P2, P3

- Ericsson think P1 is OK but think P3 is somehow contradicting P1. Don’t like P3. Ericsson are also ok w P2.

- Nokia think we have only agreed the transmit condition for type -2 which is when reestablishment is initiated, T311 start.

- Apple are ok with P1, P3 not correct. Ok with P2.

- IDT are ok with P1 and P2. P3 not. Think Type-4 is a better cho trigger. Don’t need to discuss the transmit trigger.

- LG explains that now only IAB node trigger reest only at type-4 indication. LG think CHO trigger could be an option P3 but maybe not always the best, could be configurable. IF we specify no possible behaviour then the node can only do measurmeents for prep.

- QC support P1 and P2.

Chair asks to agree P1 and P2

- ZTE asks how this can work, as we have dicussed that local re-routing can be triggered by type-4.

- LG think that this can be configurable by donor. IDT agrees with LG that this could be configurable. Intel are ok with configurable and think that type-4 doesn’t always result in local re-routing, think this is necessary. Kyocera agrees with LG

- HW are ok with P2, think that this is the ony purpose of type-2 indication, for Type-4 this si alrady in R16, Sony agrees. Samsung agrees type 4 is alreasy specified.

- QC think that this can be configurable or just defined in the TS

- SS agrees with P2, but think that also other behaviour can be triggered.

- Ericsson think that also type-2 RLF ind can result in many other behavours, e.g. on user plane whiach are not specified.

Chair Comment: The proposal to trigger CHO based on type-2 RLF indication is currently not agreeable by a clear majority.

* Upon reception of the type-2 indication, the IAB node does not initiate RRC re-establishment.
* If an IAB node with dual parents (via DC) receives type-2 BH RLF indication from one parent, IAB-node may trigger a local re-routing to the other parent. The detail of local re-routing and whether/how the action on type-2 indication is configurable is FFS.

### 8.4.4 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

[R2-2104720](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104720.zip) LS on gNB-based propagation delay compensation (R3-211136; contact: Nokia) RAN3 LS in Rel-17 NR\_IIOT\_URLLC\_enh To:RAN1, RAN2

[R2-2105867](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105867.zip) Text Proposal of Stage-2 Running CR for Rel-17 IIoT/URLLC Enhancement Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

### 8.5.2 Enhancements for support of time synchronization

Including requirements and scope.

A summary email discussion is expected for this topic

[R2-2104886](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104886.zip) Pre-compensation at the gNB for RTT and TA based PDC Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2104898](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104898.zip) Design for Time Synchronization in Rel-17 CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104901](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104901.zip) Propagation Delay Compensation for TSN Qualcomm Incorporated discussion Rel-17

[R2-2105255](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105255.zip) Discussion on the Time synchronisation assistance parameters Huawei, HiSilicon discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105289](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105289.zip) Discussion on the propagation delay compensation vivo discussion

[R2-2105307](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105307.zip) Further discussion on time synchronization and PDC ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion NR\_IIOT\_URLLC\_enh-Core R2-2100327

[R2-2105565](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105565.zip) Consideration on the support of time synchronization enhancement OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105672](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105672.zip) On propagation delay compensation MediaTek Inc. discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105674](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105674.zip) Determining per Uu Interface Time Sync Error Budget Ericsson discussion

[R2-2105723](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105723.zip) Discussion on the time synchronization error budget in RAN Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105766](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105766.zip) Synchronization and Error Budget Samsung discussion Rel-17

[R2-2105825](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105825.zip) Discussion on enabling UE side propagation delay compensation Lenovo, Motorola Mobility discussion Rel-17

[R2-2105844](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105844.zip) Propagation Delay Compensation Signaling CANON Research Centre France discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2105868](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105868.zip) Time Synchronization Signalling Analysis Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2105871](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105871.zip) [Draft] Reply LS on Time Synchronization assistance parameters Nokia, Nokia Shanghai Bell LS out Rel-17 NR\_IIOT\_URLLC\_enh To:SA2 Cc:RAN3

[R2-2106249](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106249.zip) Support of time synchronization for TSN based on RAN1 progress CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106323](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106323.zip) Discussion on Propagation Delay Compensation (PDC) III discussion

[R2-2106324](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106324.zip) Timing synchronization for UE in RRC\_INACTIVE state and RRC\_IDLE state TCL Communication Ltd. discussion Rel-17 NR\_IIOT, NR\_IIOT-Core, NR\_IIOT\_URLLC\_enh-Core

[R2-2106433](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106433.zip) Discussion on enhancements for support of time synchronization LG Electronics Deutschland discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

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

Including email discussion [POST113bis-e][505][R17 IIoT] URLLC in UCE (LG)

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.

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

[R2-2104899](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104899.zip) Autonomous retransmission on a different CG configuration CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104902.zip) CG Harmonization for Unlicensed Controlled Environment Qualcomm Incorporated discussion Rel-17

[R2-2105256](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105256.zip) Remaining issues about uplink enhancements for URLLC in UCE Huawei, HiSilicon discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105290](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105290.zip) Remaining issues of harmonizing UL CG enhancements in NR-U and IIoT vivo discussion

[R2-2105456](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105456.zip) Further details on enhancements for URLLC in UCE Lenovo, Motorola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105566](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105566.zip) Consideration on URLLC over NR-U OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105675](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105675.zip) Harmonizing UL CG enhancements in NR-U and URLLC Ericsson discussion

[R2-2105676](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105676.zip) RAN enhancements based on new QoS related parameters Ericsson discussion Withdrawn

[R2-2105689](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105689.zip) Prioritization of UL transmissions in unlicensed URLLC Sony discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2103566

[R2-2105724](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105724.zip) Remaining issues of CG harmonization Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105789](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105789.zip) Configured grant mode switching for IIoT/URLLC in unlicensed controlled environments III discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105856](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105856.zip) Further Consideration On the URLLC transmission in UCE ZTE, Sanechips discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105872](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105872.zip) Remaining Issues on Configured Grant for IIoT in NR-U Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2105952](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105952.zip) Uplink enhancements for URLLC in unlicensed controlled environments Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106226](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106226.zip) Discussion on the remaining issue for uplink enhancements for URLLC in UCE CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2106381](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106381.zip) Remaining Issue of Harmonization of CG Transmission Samsung discussion Rel-17

R2-2106395 Summary of [POST113bis-e][505][R17 IIoT] URLLC in UCE LG Electronics Inc. discussion Late

[R2-2106396](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106396.zip) Summary of [POST113bis-e][505][R17 IIoT] URLLC in UCE LG Electronics Inc. discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2106400](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106400.zip) URLLC on UCE LG Electronics Inc. discussion NR\_IIOT\_URLLC\_enh-Core Late

### 8.5.4 RAN enhancements based on new QoS

Including email discussion [POST113bis-e][506][R17 IIoT] Enhancements based on QoS (CATT)

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 if any, e.g. survival time, burst spread, decided in SA2. [RAN2, RAN3]

[R2-2104897](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104897.zip) Summary of Email Discussion 506 – R17 IIOT QoS CATT discussion NR\_IIOT\_URLLC\_enh-Core Late

[R2-2104900](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104900.zip) Comparison of the solutions for Survival Time CATT discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2104903](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104903.zip) RAN Enhancement to support new QoS Qualcomm Incorporated discussion Rel-17

[R2-2104980](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104980.zip) Topics on new QoS handling Fujitsu discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2003196

[R2-2105114](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105114.zip) Reliability enhancements for CG/SPS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105115](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105115.zip) Further considerations on survival time for new QoS Apple discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105312](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105312.zip) Further discussion on enhanced QoS ZTE Corporation, Sanechips, China Southern Power Grid Co., Ltd discussion NR\_IIOT\_URLLC\_enh-Core

[R2-2105419](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105419.zip) Further discussion on RAN enhancements based on Survival Time III discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105457](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105457.zip) Discussion on the mechanism to guarantee the survival time Lenovo, Motorola Mobility discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2105567](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105567.zip) Consideration on RAN enhancement based on new QoS OPPO discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

R2-2105604 Entering and operating in the Survival Time state Samsung Electronics GmbH discussion Withdrawn

R2-2105615 Entering and operating in the Survival Time state Samsung Electronics GmbH discussion Withdrawn

[R2-2105638](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105638.zip) Entering and operating in the Survival Time state Samsung Electronics GmbH discussion

[R2-2105725](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105725.zip) Clarification on the survival time Xiaomi Communications discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core R2-2104288

[R2-2105873](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105873.zip) RAN Enhancement for New QoS Parameters Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2105954](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105954.zip) Discussion on the roles played in the survival time operation Futurewei Technologies discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106041](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106041.zip) Discussion on multi-level PERs for survival time handling Huawei, HiSilicon discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106044](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106044.zip) Enhancements based on new QoS requirements InterDigital discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106066](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106066.zip) RAN2 Enhancements to Support Survival Time Intel Corporation discussion Rel-17 NR\_IIOT\_URLLC\_enh-Core

[R2-2106227](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106227.zip) Discussion on the RAN support for new QoS parameters CMCC discussion Rel-17 NR\_IIOT\_URLLC\_enh

[R2-2106328](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106328.zip) Discussion of RAN enhancements based on new QoS TCL Communication Ltd. discussion Rel-17 NR\_IIOT, NR\_IIOT-Core, NR\_IIOT\_URLLC\_enh-Core

[R2-2106397](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106397.zip) Enhancement for survival time LG Electronics Inc. discussion NR\_IIOT\_URLLC\_enh-Core Late

[R2-2106413](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106413.zip) RAN enhancements based on new QoS related parameters Oy LM Ericsson AB discussion

## 8.6 Small Data enhancements

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

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 2 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)

[R2-2104707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104707.zip) Reply LS on uplink timing alignment for small data transmissions (R1-2104012; contact: Lenovo) RAN1 LS in Rel-17 NR\_SmallData\_INACTIVE-Core To:RAN2 Cc:RAN4

[R2-2105032](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105032.zip) Runnning MAC CR for small data Huawei, HiSilicon draftCR Rel-17 38.321 16.4.0 B NR\_SmallData\_INACTIVE-Core

R2-2105639 Discussion on the spec modeling for Small Data Huawei, HiSilicon, ZTE Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core Revised

[R2-2105847](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105847.zip) Discussion on the spec modeling for Small Data Huawei, HiSilicon, ZTE corporation, Sanechips discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2105639

[R2-2105877](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105877.zip) Stage-2 running CR Introduction of SDT Nokia, Nokia Shanghai Bell CR Rel-17 38.300 16.5.0 0357 1 B NR\_SmallData\_INACTIVE-Core R2-2103527

[R2-2105927](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105927.zip) RRC Running CR for SDT ZTE Corporation (rapporteur) draftCR Rel-17 38.331 16.4.1 B NR\_SmallData\_INACTIVE-Core

### 8.6.2 User plane common aspects

This AI will NOT be treated in RAN2#114

NOTE: expected input: paper containing the remaining proposals not discussed as part of [AT113bis-e][501] from rapporteur. This is the only paper that may be treated.

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

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

[R2-2104760](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104760.zip) Further Discussion on User Plane Aspect for Small Data Transmission vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104770](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104770.zip) Discussion on common user plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104784](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104784.zip) User Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104964](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104964.zip) Handling of fallback during a SDT procedure Asia Pacific Telecom, FGI discussion

[R2-2105280](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105280.zip) Consideration on UP common aspects of SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105447](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105447.zip) User plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105455](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105455.zip) UP common issues for Small Data Transmissions Lenovo, Motorola Mobility discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105597](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105597.zip) Consideration on overall SDT procedure LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105690](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105690.zip) Some aspects of User Plane for SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103583

[R2-2105760](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105760.zip) Common aspects for SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106043](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106043.zip) User plane aspects of small data transmission InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106254](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106254.zip) Remaining issues on SDT procedure CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106310](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106310.zip) Remaining untreated proposals from [AT113bis-e][501] UP SDT open issues LG Electronics Inc. (Rapporteur) report Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106311](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106311.zip) Remaining UP issues in SDT LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 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

[R2-2104761](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104761.zip) Discussion on RRC-Controlled Small Data Transmission vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104771](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104771.zip) Discussion on common control plane issues of SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104785](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104785.zip) Control Plane Common Aspects of RACH and CG based SDT Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104881](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104881.zip) Failure and successful handling for an SDT session Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104882](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104882.zip) CP-SDT remaining open issues Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104981](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104981.zip) Handling of T319-like timer Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104982](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104982.zip) RAN paging reception and response during SDT Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103198

[R2-2105100](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105100.zip) Power Saving for SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105101](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105101.zip) Control plane aspects on the SDT procedure Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105102](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105102.zip) Subsequent data transmission for SDT Apple discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105281](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105281.zip) Consideration on CP issues CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105377](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105377.zip) Beam management in SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103455

[R2-2105448](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105448.zip) Control plane aspects of SDT NEC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105575](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105575.zip) Control plane common aspects for SDT Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105691](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105691.zip) Discussion on subsequent SDT in NR, timer handling, and support for SRB1/2 Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105720](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105720.zip) Discussion on the support of the RRC-less SDT Xiaomi Communications, Intel Corporation, ASUSTeK, Fujitsu, MediaTek, Apple, Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2104221

[R2-2105721](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105721.zip) Technical details of the RRC-less SDT Xiaomi Communications, ASUSTeK, Fujitsu, Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2104222

[R2-2105810](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105810.zip) Consideration on CP issues for small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2105885](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105885.zip) Discussion on open issues of SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103431

[R2-2105911](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105911.zip) SDT control plane aspects Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE

[R2-2105928](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105928.zip) Control plane common aspects of SDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2106040](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106040.zip) SDT cell re-selection Convida Wireless other Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106050](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106050.zip) SDT CP and configuration aspects InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106051](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106051.zip) Untreated proposal from [Post113-e][503] InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2106132](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106132.zip) Discussion on CP aspects of SDT China Telecomunication Corp. discussion

[R2-2106217](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106217.zip) Beam selection and indication for subsequent SDT ETRI discussion

[R2-2106255](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106255.zip) Handling of non-SDT data arriving CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.4 Aspects specific to RACH based schemes

Including email discussion on [Post114][507]

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

[R2-2104762](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104762.zip) Report of [Post113bis-e][507][SDT] Resource Configuration Aspects vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

=> Revised in [R2-2106443](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106443.zip)

[R2-2106443](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106443.zip) Report of [Post113bis-e][507][SDT] Resource Configuration Aspects vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core Late

[R2-2104763](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104763.zip) Supporting Small Data Transmission via RA Procedure vivo discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104772](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104772.zip) Discussion on RACH-based SDT OPPO discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104786](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104786.zip) Details of RACH bsaed Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104883](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104883.zip) RA-SDT remaining open issues Intel Corporation discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104965](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104965.zip) PDCCH monitoring in RA-based SDT procedure Asia Pacific Telecom, FGI discussion

[R2-2105378](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105378.zip) Discussion on PDCCH monitoring for RA-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105549](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105549.zip) Discussion on RACH-based SDT Spreadtrum Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105574](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105574.zip) Small data transmission with RA-based schemes Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105692](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105692.zip) Discussion on context fetch and anchor relocation Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103580

[R2-2105693](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105693.zip) RACH-based SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105758](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105758.zip) RACH based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105878](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105878.zip) Details of RACH specific schemes Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105886](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105886.zip) Discussion on open issues for RACH based SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103433

[R2-2105929](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105929.zip) Open issues for RACH based SDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2106131](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106131.zip) Considerations on Open issues in RA-SDT China Telecomunication Corp. discussion

[R2-2106256](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106256.zip) Anchor relocation and context fetch CMCC discussion Rel-17 NR\_SmallData\_INACTIVE-Core

### 8.6.5 Aspects specific to CG based schemes

This AI will NOT be treated in RAN2#114

NOTE: expected input: paper containing the remaining proposals not discussed as part of [Post113-e][504] from rapporteur to be treated.

Contributions can be submitted but not required and should focus only on new highly critical open issues and resolving the FFSs

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

[R2-2104787](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104787.zip) Details of Configured Grant based Small Data Transmission Samsung Electronics Co., Ltd discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2104968](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104968.zip) Beam selection and failure handling for CG-SDT Asia Pacific Telecom, FGI discussion

[R2-2104983](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104983.zip) PDCCH monitoring after SDT-TAT expiry Fujitsu discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2003199

[R2-2105031](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105031.zip) Remaining untreated proposals from [POST113-e][504][SDT] CG Open Issues Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105282](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105282.zip) Analysis and views on CG-SDT CATT discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105379](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105379.zip) Beam selection for CG-SDT ASUSTeK discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103457

[R2-2105465](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105465.zip) Aspects specific to CG based SDT Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105576](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105576.zip) Small data transmission with CG-based scheme Huawei, HiSilicon discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105598](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105598.zip) Discussion on CG-SDT open issues LG Electronics Inc. discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105694](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105694.zip) CG-based SDT in NR Sony discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103581

[R2-2105722](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105722.zip) Remaining issues of CG SDT Xiaomi Communications discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2104223

[R2-2105759](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105759.zip) Details of CG based SDT Ericsson discussion Rel-17 NR\_SmallData\_INACTIVE-Core

[R2-2105811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105811.zip) Consideration on CG based small data transmission Lenovo, Motorola Mobility discussion Rel-17

[R2-2105887](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105887.zip) Discussion on open issues for CG based SDT Qualcomm Incorporated discussion Rel-17 NR\_SmallData\_INACTIVE-Core R2-2103434

[R2-2105930](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105930.zip) Open issues for CG based SDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2106012](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106012.zip) Discussion on CG-SDT Request by UE NEC Telecom MODUS Ltd. discussion

[R2-2106042](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106042.zip) CG-based SDT selection and configuration InterDigital discussion Rel-17 NR\_SmallData\_INACTIVE-Core

## 8.7 NR Sidelink relay SI

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

Time budget: 1 TU

Tdoc Limitation: 4 tdocs

Email max expectation: 4 threads

Focus for this meeting: Conclude stage 2 issues for the common topics on relay discovery and re/selection. L2 relay specific topics will be treated at lower priority.

### 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.

[R2-2104837](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104837.zip) Work planning for R17 SL relay OPPO, CMCC Work Plan Rel-17 NR\_SL\_relay-Core

[R2-2104945](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104945.zip) Running CR on Introduction of Rel-17 Sidelink Relay MediaTek Inc. discussion Rel-17

### 8.7.2 Relay discovery

Re-using LTE discovery as baseline.

[R2-2104736](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104736.zip) Remaining issues on relay discovery Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

[R2-2104746](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104746.zip) Leftover Issues on Sidelink Discovery CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104869](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104869.zip) Discovery Procedure for sidelink relay InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104892](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104892.zip) Discussion on remaining issues of NR sidelink relay discovery OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104958](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104958.zip) Remaining issues on Relay discovery procedure vivo discussion Rel-17

[R2-2104976](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104976.zip) Discussion on Relay discovery in Sidelink Relay ZTE, Sanechips discussion Rel-17

[R2-2105022](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105022.zip) Open aspects on relay discovery Intel Corporation discussion Rel-17 NR\_SL\_relay

[R2-2105342](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105342.zip) Remaining issues for SL relay discovery Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2105390](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105390.zip) Discovery resources for sidelink relaying Kyocera discussion

[R2-2105491](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105491.zip) Left issues for SL discovery Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2105535](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105535.zip) Discussion on Ralay discovery Spreadtrum Communications discussion Rel-17 NR\_SL\_relay-Core

[R2-2105740](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105740.zip) Remaining issues on discovery for sidelink relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2105742](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105742.zip) Use of Pre-configuration and collocated neighbour cell carrier Beijing Xiaomi Mobile Software discussion

[R2-2105807](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105807.zip) Relay Discovery for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2106266](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106266.zip) Left issues for relay discovery message transmission LG Electronics Inc. discussion Rel-17

[R2-2106435](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106435.zip) Consideration on remaining issues of NR sidelink relay discovery China Telecommunications discussion

[R2-2106437](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106437.zip) Remaining issues on Relay Discovery MediaTek Inc. discussion Rel-17 NR\_SL\_relay-Core

### 8.7.3 Relay re selection

Re-using LTE re/selection as baseline. Including outcome of [Post113bis-e][602][Relay] Definition of relay load criterion (Ericsson).

[R2-2104737](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104737.zip) Remaining issues on relay (re)selection Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

=> Revised in [R2-2104745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104745.zip)

[R2-2104745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104745.zip) Remaining issues on relay (re)selection Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core Late

[R2-2104747](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104747.zip) Remain Issues on Relay (Re)selection CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104870](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104870.zip) Relay selection and reselection InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104889](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104889.zip) Open aspects of Relay (re)selection Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2104893](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104893.zip) Discussion on remaining issues of NR sidelink relay (re)selection OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104959](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104959.zip) Remaining issues on Relay (re)selection vivo discussion Rel-17

[R2-2104971](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104971.zip) Remaining Open Issues on Relay (re-)selection Fraunhofer HHI, Fraunhofer IIS discussion Rel-17

[R2-2104977](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104977.zip) Discussion on Relay selection in Sidelink Relay ZTE, Sanechips discussion Rel-17

[R2-2105127](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105127.zip) Discussion on remaining issues of relay (re)selection and discovery Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105238](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105238.zip) Discussion on some relay (re)selection issues Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2105492](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105492.zip) Aspects for SL relay selection and reselection Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2105496](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105496.zip) [Post113bis-e][602][Relay] Definition of relay load criterion (Ericsson] Ericsson report Rel-17 NR\_SL\_relay-Core

[R2-2105515](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105515.zip) Discussion on sidelink relay reselection SHARP Corporation discussion

[R2-2105536](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105536.zip) Discussion on Ralay selection and reselection Spreadtrum Communications discussion Rel-17 NR\_SL\_relay-Core

[R2-2105695](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105695.zip) Relay (re)selection Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2105750](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105750.zip) Remote UE use of Relay UE Load Indication Beijing Xiaomi Mobile Software discussion

[R2-2105790](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105790.zip) Remaining PDB in UE-to-NW and UE-to-UE Relay Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_relay-Core

[R2-2105808](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105808.zip) Relay (re)selection for L2 and L3 relay Lenovo, Motorola Mobility discussion Rel-17

[R2-2106011](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106011.zip) View on definition of relay load criterion Continental Automotive GmbH discussion

[R2-2106160](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106160.zip) Remaining issues on relay selection and reselection Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2106203](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106203.zip) Use of relay load as a Relay (re)selection criterion MediaTek Inc. discussion Rel-17

[R2-2106251](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106251.zip) Remaining issues on AS criteria for relay selection CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2106268](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106268.zip) AS layer criteria for relay selection and reselection LG Electronics Inc. discussion Rel-17

[R2-2106271](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106271.zip) left L2/L3 common issues for relay selection and reselection LG Electronics Inc. discussion Rel-17

[R2-2106344](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106344.zip) Other remaining issues on (re)selection MediaTek Inc. discussion Rel-17

### 8.7.4 L2 relay specific topics

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

[R2-2104742](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104742.zip) Further discussion adaptation layer of L2 U2N relay Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

#### 8.7.4.1 Control plane procedures

Including connection management, SI delivery, paging, access control for remote UE.

[R2-2104738](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104738.zip) Further discussion on control plane procedures of L2 U2N relay Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

[R2-2104748](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104748.zip) Control Plane Procedures of L2 Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104838](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104838.zip) Left issues on RRC procedure for L2 U2N Relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104871](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104871.zip) Control Plane Procedures for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104888](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104888.zip) Control plane procedures for L2N relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2104946](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104946.zip) Stage 2 level procedure for Connection Establishment MediaTek Inc. discussion Rel-17

[R2-2104960](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104960.zip) Further Discussion on L2 Control Plane Procedures vivo discussion Rel-17

[R2-2104978](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104978.zip) Consideration on the control plane procedure of SL relay ZTE, Sanechips discussion Rel-17

[R2-2105030](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105030.zip) Open Issues in L2 Relay Control Plane Procedures Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2105074](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105074.zip) Monitoring Paging by a U2N Relay Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2105076](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105076.zip) SI acquisition, CN Registration and RNAU Lenovo, Motorola Mobility discussion NR\_SL\_relay-Core

[R2-2105128](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105128.zip) Discussion on Unified Access Control in Relay UE Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105129](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105129.zip) Discussion on RNA Update procedures in L2 UE-to-NW Relay Apple discussion Rel-17 NR\_SL\_relay-Core

=> Revised in [R2-2106450](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106450.zip)

[R2-2106450](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106450.zip) Discussion on RNA Update procedures in L2 UE-to-NW Relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105130](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105130.zip) Discussion on QoS mechanism for Layer 2 UE-to-NW relay Apple discussion Rel-17 NR\_SL\_relay-Core

[R2-2105343](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105343.zip) On-demand SI request for Remote UE Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2105380](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105380.zip) Discussion on on-demand SI acquisition procedure for U2N Relay ASUSTeK discussion Rel-17 NR\_SL\_relay-Core

[R2-2105391](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105391.zip) RRC state transitions and RLF handling in L2 relaying Kyocera discussion

[R2-2105486](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105486.zip) Connection control on L2 relay Xiaomi communications discussion

[R2-2105537](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105537.zip) Discussion on control plane procedures for L2 U2N relay Spreadtrum Communications discussion Rel-17 NR\_SL\_relay-Core

[R2-2105678](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105678.zip) Various configuration and QoS management aspects of L2 relaying Samsung Electronics GmbH discussion

[R2-2105696](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105696.zip) L2 relay control plane procedures Sony discussion Rel-17 NR\_SL\_relay-Core

[R2-2105739](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105739.zip) SIB Handling in Sidelink UE-to-Nwk Relay Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_SL\_relay R2-2103482

[R2-2105773](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105773.zip) Discussion on control plane procedures for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2105960](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105960.zip) Paging and SI deliveries for L2 relay ETRI discussion Rel-17 NR\_SL\_relay-Core

[R2-2106054](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106054.zip) Discussion on Uu adaptation layer in L2 UE-to-NW relay Nokia, Nokia Shanghai Bell discussion NR\_SL\_relay

[R2-2106161](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106161.zip) Discussion on the CP procedures for L2 Relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2106252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106252.zip) Discussion on control plane procedure CMCC discussion Rel-17 NR\_SL\_relay-Core

[R2-2106273](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106273.zip) L2 relay specific topics related to the control plane procedures LG Electronics Inc. discussion Rel-17

[R2-2106293](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106293.zip) Discussion on establishment cause value of relay UE Xiaomi, Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility, Vivo, Apple, ZTE discussion

#### 8.7.4.2 Service continuity

Service continuity between Uu and relay paths, limited to intra-gNB cases. This AI will be treated on a time-available basis

[R2-2104739](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104739.zip) Service continuity of L2 U2N relay Qualcomm Incorporated discussion Rel-17 NR\_SL\_relay-Core

[R2-2104749](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104749.zip) Service Continuity for L2 U2N Relay CATT discussion Rel-17 NR\_SL\_relay-Core

[R2-2104872](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104872.zip) Service Continuity for L2 UE to NW Relays InterDigital discussion Rel-17 FS\_NR\_SL\_relay

[R2-2104891](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104891.zip) Service Continuity support for L2 U2N Relaying Intel Corporation discussion Rel-17 NR\_SL\_relay-Core

[R2-2104894](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104894.zip) Discussion on service continuity in NR sidelink relay OPPO discussion Rel-17 NR\_SL\_relay-Core

[R2-2104961](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104961.zip) Service continuity and Adaptation Layer for L2 SL Relay vivo discussion Rel-17

[R2-2104979](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104979.zip) Discussion on the service continuity of SL relay ZTE, Sanechips discussion Rel-17

[R2-2105029](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105029.zip) Open Issues in Switches between Direct and Indirect Paths Futurewei discussion Rel-17 NR\_SL\_relay-Core

[R2-2105344](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105344.zip) Service continuity support for SL remote UE Samsung discussion Rel-17 NR\_SL\_relay-Core

[R2-2105741](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105741.zip) Discussion on service continuity and adaptation layer for L2 UE to NW Relay Huawei, HiSilicon discussion Rel-17 NR\_SL\_relay-Core

[R2-2105774](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105774.zip) Discussion on service continuity for L2 sidelink relay Ericsson discussion Rel-17 NR\_SL\_relay-Core

[R2-2106253](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106253.zip) Service continuity for L2 relay CMCC discussion Rel-17 NR\_SL\_relay-Core

## 8.8 RAN slicing

(NR\_Slice -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

Including discussion on whether SMBR enforcement can impact SA2 work (postponed in RAN2#113bis-e, see R2-2103647) - 1 Tdoc per company allowed (does not count against Tdoc limit)

R2-2104743 Draft LS to SA2 on slice grouping and slice priority Qualcomm Incorporated LS out Rel-17 NR\_slice To:SA2 Late

R2-2104744 Discussion on SMBR enforcement Qualcomm Incorporated discussion Rel-17 NR\_slice-Core Withdrawn

[R2-2105239](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105239.zip) Discussion on Uplink SMBR enforcement Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_slice-Core

[R2-2105942](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105942.zip) SMBR enforcement in RAN Ericsson discussion Rel-17 NR\_slice-Core

[R2-2106155](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106155.zip) Discussion on SMBR enforcement Huawei, HiSilicon discussion Rel-17 NR\_slice-Core

[R2-2106223](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106223.zip) Discussion on SMBR enforcement in RAN CMCC discussion Rel-17 NR\_slice

R2-2106373 UL SMBR enforcement Samsung discussion Rel-17 Withdrawn

[R2-2106374](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106374.zip) UL SMBR enforcement Samsung discussion Rel-17

[R2-2106418](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106418.zip) SMBR enforcement in RAN Intel Corporation discussion Rel-17 NR\_slice-Core

### 8.8.2 Cell reselection

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

[R2-2104740](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104740.zip) Further discussion on slice specific cell reselection Qualcomm Incorporated discussion Rel-17 NR\_slice-Core

[R2-2104782](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104782.zip) Considerations on slice based cell reselection Beijing Xiaomi Software Tech discussion Rel-17

[R2-2104791](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104791.zip) Discussion on slice aware cell reselection ZTE corporation, Sanechips discussion Rel-17 NR\_slice-Core

[R2-2104873](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104873.zip) Frequency prioritization for slice specific cell (re)selection Intel Corporation discussion Rel-17 NR\_slice-Core

[R2-2105109](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105109.zip) Discussion on slice based cell reselection Apple discussion Rel-17

[R2-2105203](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105203.zip) Discussion on frequency priority for inter-frequency cell reselection China Telecommunication discussion Rel-17

[R2-2105212](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105212.zip) Further discussion on slice-based cell reselection Lenovo, Motorola Mobility discussion Rel-17 NR\_slice-Core

[R2-2105240](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105240.zip) Slice specific cell reselection Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_slice-Core

[R2-2105331](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105331.zip) Discussion on slice-based reselection vivo discussion Rel-17 NR\_slice-Core

[R2-2105438](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105438.zip) Discussion on slice based cell reselection Samsung Electronics Co., Ltd discussion Rel-17 NR\_slice-Core

[R2-2105533](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105533.zip) Discussion on slice based cell reselection Spreadtrum Communications discussion Rel-17

[R2-2105568](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105568.zip) Consideration on slice-specific cell reselection OPPO discussion Rel-17 NR\_slice-Core

R2-2105630 Cell (re)selection for RAN slicing FGI discussion Withdrawn

[R2-2105631](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105631.zip) Cell (re)selection for RAN slicing Asia Pacific Telecom, FGI discussion

[R2-2105697](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105697.zip) Slice based Cell Reselection and intended slice Sony discussion Rel-17 NR\_slice-Core

[R2-2105738](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105738.zip) Considerations on contents of slice related cell selection info KDDI Corporation discussion Late

[R2-2105880](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105880.zip) Discussion on slice aware cell reselection LG Electronics UK discussion Rel-17

[R2-2105943](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105943.zip) Cell re-selection enhancements for slicing Ericsson discussion Rel-17 NR\_slice-Core

[R2-2105944](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105944.zip) RACH for RAN slicing enhancement Ericsson discussion Rel-17 NR\_slice-Core

[R2-2106013](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106013.zip) Slice-based cell/frequency prioritization NEC Telecom MODUS Ltd. discussion

[R2-2106087](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106087.zip) Consideration on slice-based cell reselection SHARP Corporation discussion Rel-17

[R2-2106156](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106156.zip) Discussion on slice based cell reselection under network control Huawei, HiSilicon discussion Rel-17 NR\_slice-Core

[R2-2106175](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106175.zip) Discussion on Slice-based Cell Reselection CATT discussion NR\_slice-Core

[R2-2106224](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106224.zip) Discussion on slice based cell reselection CMCC discussion Rel-17 NR\_slice

### 8.8.3 RACH

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.

Including discussion on how to resolve prioritization parameter collision with MPS/MCS: Should we consider UE-based solution or NW-based solution? both

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.

NOTE: Since RACH partitioning potentially impacts multiple WIs (RAN slicing, RedCap, Small Data Transmission, CovEnh),focus should be on understanding on the requirements for the RACH partitioning for RAN slicing to allow for common Rel-17 design.

[R2-2104741](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104741.zip) Further discussion on slice specific RACH Qualcomm Incorporated discussion Rel-17 NR\_slice-Core

[R2-2104789](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104789.zip) Considerations on slice based RACH configuration Beijing Xiaomi Software Tech discussion Rel-17

[R2-2104792](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104792.zip) Slice specific RACH resources and RACH prioritization ZTE corporation, Sanechips discussion Rel-17 NR\_slice-Core

[R2-2104874](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104874.zip) Further considerations of slice based RACH Intel Corporation discussion Rel-17 NR\_slice-Core

[R2-2105110](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105110.zip) Discussion on slice based RACH Apple discussion Rel-17

[R2-2105213](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105213.zip) Further discussion on slice-based PRACH configuration Lenovo, Motorola Mobility discussion Rel-17 NR\_slice-Core

[R2-2105332](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105332.zip) Discussion on slice-based RACH configuration vivo discussion Rel-17 NR\_slice-Core

[R2-2105345](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105345.zip) Slice specific RACH configuration Samsung discussion Rel-17 NR\_slice-Core

[R2-2105475](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105475.zip) Slice-specific RACH prioritisation Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_slice

[R2-2105534](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105534.zip) Consideration on slice based RACH configuration Spreadtrum Communications discussion Rel-17

[R2-2105569](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105569.zip) Consideration on slice-specific RACH OPPO discussion Rel-17 NR\_slice-Core

[R2-2106014](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106014.zip) RAN Slicing remaining RACH issues NEC Telecom MODUS Ltd. discussion

[R2-2106157](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106157.zip) Discussion on slice based RACH configuration Huawei, HiSilicon discussion Rel-17 NR\_slice-Core

[R2-2106184](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106184.zip) Analysis on slice based RACH configuration CATT discussion NR\_slice-Core

[R2-2106225](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106225.zip) Discussion on slice based RACH configuration CMCC discussion Rel-17 NR\_slice

[R2-2106375](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106375.zip) Discussion on slice-specific RACH operation LG electronics discussion Rel-17 NR\_slice-Core Late

## 8.9 UE Power Saving

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

Time budget: 0 TU

Tdoc Limitation: 1 tdocs

Email max expectation: 1 threads

### 8.9.1 Organizational Scope and Requirements

E.g. Rapporteur input. No input expected to be treated.

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

1 tdoc ONLY invited on the specific issue whether CN or RAN shall control the UE grouping. To be treated by email during the meeting. This issue is considered urgent as it need to be resolved to determine impact to other Groups.

* [AT114-e][025][ePowSav] Subgrouping network architecture (Mediatek)

Scope: Address whether CN or RAN shall be responsible for paging subgrouping based on UE characteristics. As this may be related to availability of information on UE characteristics in the CN or RAN network entity, can also discuss if needed provisioning of assistance information (e.g. between the network entities or from UE to the responsible network entity). The discussion shall be based on the contributions under 8.9.2.

Intended outcome: Report, with discussion, and presenting the main alternatives on the table with documented justifications, way forward.

CLOSED

[R2-2106666](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106666.zip) Report of [AT114-e][025][ePowSav] Subgrouping network architecture Mediatek Inc.

DISCUSSION

P1

- CN vs RAN assigned UE sub-grouping based on UE characteristics.

- Oppo think the question in the email discussion the question was asked differently, Oppo think that many companies indicated just “yes”

- Huawei agrees with oppo. Cannot decide based on company replies.

I: Address whether CN or RAN shall be responsible for UE paging subgrouping based on UE characteristics

- Xiaomi think that for RAN paging RAN should assign UE group and for CN paging CN shold assign group ID. Apple agrees.

- Ericssion prefer CN assigned grouping as CN has the informatiom to do grouping, and think there are issues with RAN assigned grouping e.g. the policy shold be consistent when the UE moves. Ericsson think RAN can provide info to CN if needed.

- intel has preference (slight) for RAN, as all the subgrouping configuration is in RAN, but do acknowledge that there may be a consistency issue acrorss areas, are also ok with CN. Think mobility info etc is already there.

- Apple think there may indeed be consistency issue to be resolved.

- Nokia think CN controlled.

- Sony think CN based, as RAN doesn’t really have information about UEs in Idle. Then RAN is responsible to map to paging resources. Think we could discuss for Inactive.

- ZTE, QC, NEC, LG, BT, Samsung prefer CN assignment.

- Lenovo are ok with CN. Leonovo wonder if this measn that CN allocates Group ID or subgroup set?

- xiaomi think we can further discss whether we use different group for inactive,

- ZTE think that xiaomis proposal will bring extra complexity.

II: Use same subgroup when in RRC\_IDLE and RRC\_INACTIVE?

- MTK indicate that there is a big majority for same. Ericsson, QC, ZTE agrees.

- Sony think that the gNB can reassign UE subgroup when UE is in Inactive. Sony think that the UE behaviour is different in Idle and Inactive.

- QC think the CN responsibility can be the baseline.

- Vodafone think that states may get out of synch if the Cn and RAN assume differnet grouping.

Chair think we can at least conclude on what is supported as baseline.

The following is supported:

* CN is responsible for allocating UEs to UE paging subgroups based on UE characteristics
* Use same UE subgroups when in RRC\_IDLE and RRC\_INACTIVE

[R2-2104773](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104773.zip) Paging subgroup assignment Qualcomm Incorporated discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2104783](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104783.zip) Paging Enhancements\_UE Grouping Samsung Electronics Co., Ltd discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2104807](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104807.zip) Discussion on grouping-based paging OPPO discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2104909](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104909.zip) UE sub-grouping for paging enhancement vivo discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105021](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105021.zip) Further considerations of network assigned subgrouping Intel Corporation discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105087](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105087.zip) NR UE Power Save IDLE/INACTIVE Paging Grouping Schemes Apple discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105283](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105283.zip) UE subgrouping schemes with paging enhancement CATT discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105293](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105293.zip) UE Paging Subgroup Assignment for Power Saving MediaTek Inc. discussion

[R2-2105295](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105295.zip) Discussion on idle\_inactive\_mode UE power saving Xiaomi Communications discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105411](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105411.zip) Details on paging subgrouping determination and indication Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105656](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105656.zip) Grouping methods for Paging Ericsson discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105718](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105718.zip) Discussion on the control node for UE grouping Huawei, HiSilicon discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105736](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105736.zip) PEI monitoring in NR: CN and System level impacts VODAFONE Group Plc discussion

[R2-2105809](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105809.zip) Consideration on Idle/inactive-mode UE power saving Lenovo, Motorola Mobility discussion Rel-17

[R2-2105855](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105855.zip) Further Consideration on UE Grouping ZTE, Sanechips discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2105956](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105956.zip) Discussion on UE grouping control entity Futurewei Technologies discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2106257](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106257.zip) Considerations on paging subgrouping CMCC discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

[R2-2106349](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106349.zip) UE subgrouping for paging enhancement LG Electronics Inc. discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

* 18 tdocs above are noted

### 8.9.3 Other aspects RAN2 impacts

No input expected

[R2-2105088](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105088.zip) NR UE Power Save TRS/CSI-RS Signaling for IDLE/INACTIVE UEs Apple discussion Rel-17 NR\_UE\_pow\_sav\_enh-Core

Not Treated

## 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

[R2-2104962](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104962.zip) NTN Stage2 running CR 38.300 THALES draftCR Rel-17 38.300 16.5.0 NR\_NTN\_solutions R2-2102049

### 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.

[R2-2104703](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104703.zip) LS to ITU-T on extraterritorial use of MCC+MNC for satellite networks (C1-212539; contact: Qualcomm) CT1 LS in Rel-17 5GSAT\_ARCH-CT To:ITU-T SG 2 Cc:CT, SA, SA1, SA2, RAN2, SA3LI

[R2-2104730](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104730.zip) Reply to LS on UE location aspects in NTN (S2-2103550; contact: Thales) SA2 LS in Rel-17 5GSAT\_ARCH To:RAN2 Cc:SA3-LI, RAN3, SA3, CT1

[R2-2104731](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104731.zip) LS on PDB for new 5QI (S2-2103552; contact: Ericsson) SA2 LS in Rel-17 5GSAT\_ARCH To:RAN1, RAN2 Cc:RAN3

[R2-2104806](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104806.zip) Stage-3 running 304 CR for NTN ZTE corporation, Sanechips draftCR Rel-17 38.304 16.4.0 NR\_NTN\_solutions-Core

[R2-2104963](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104963.zip) NR-NTN-solutions work plan THALES Work Plan Rel-17 NR\_NTN\_solutions

[R2-2105953](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105953.zip) Stage-3 running RRC CR for NTN Rel-17 Ericsson draftCR Rel-16 38.331 16.4.1 NR\_NTN\_solutions-Core

R2-2106049 Stage 3 NTN running CR for 38.321 - RAN2#114 InterDigital discussion Rel-17 NR\_NTN\_solutions-Core Late

[R2-2106091](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106091.zip) DRAFT Reply LS on PDB for new 5QI Ericsson LS out Rel-17 5GSAT\_ARCH, NR\_NTN\_solutions-Core To:SA2 Cc:RAN1, RAN3

### 8.10.2 User Plane

[R2-2105116](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105116.zip) Way forward for NTN Ephemeris Discussions for pre-compensation, idle mode and connected mode procedures Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106048](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106048.zip) MAC open issues in NTN - RAN2#114 InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.2.1 RACH aspects

This agenda item will be deprioritized during this meeting. The only discussion will be on resolving the first FFS (and in case the last) in: "[Post113bis-e][000]: It is FFS whether the UE reports the UE specific TA pre-compensation at the RACH procedure (MSG3 or MSG5) using a MAC CE. Actual content is FFS and also depends on further RAN1 input. Configurability is FFS"

[R2-2104812](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104812.zip) Discussion on RACH in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104966](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104966.zip) Discussion on UE-specific TA report Asia Pacific Telecom, FGI discussion

[R2-2105118](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105118.zip) On reporting UE specific TA pre-compensation during RACH in NTN Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105199](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105199.zip) Discussion of RACH in NTN China Telecommunication discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105381](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105381.zip) Discussion on LCH-based RA type selection ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105382](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105382.zip) BSR over 2-step RA ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105412](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105412.zip) On RACH aspects for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105817](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105817.zip) Considerations on new criteria for RA type selection Lenovo, Motorola Mobility discussion Rel-17

[R2-2106015](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106015.zip) NTN Remaining RACH issues NEC Telecom MODUS Ltd. discussion

[R2-2106090](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106090.zip) Reporting information about UE specific TA pre-compensation Ericsson. Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106197](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106197.zip) Discussion on RACH and TA report aspects LG Electronics Inc. discussion NR\_NTN\_solutions-Core

[R2-2106362](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106362.zip) Discussion On TA report Xiaomi, Saumsung, Qualcomm Incorporated, Asia Pacific Telecom, Huawei, HiSilicon, OPPO, Lenovo, Motorola Mobility discussion Rel-17

[R2-2106385](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106385.zip) NTN MAC enhancements Convida Wireless discussion

#### 8.10.2.2 Other MAC aspects

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

[R2-2104813](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104813.zip) Discussion on UL HARQ operation in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104850](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104850.zip) About HARQ for NTN THALES discussion Rel-17

[R2-2104851](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104851.zip) Discussion on HARQ Aspects and UL Scheduling Enhancement in NTN CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104967](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104967.zip) HARQ retransmission schemes in NTN Asia Pacific Telecom, FGI discussion

[R2-2105119](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105119.zip) Other MAC aspects for NR NTN Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105249](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105249.zip) Round trip delay offset for configured grant timers MediaTek Inc. discussion R2-2102823

[R2-2105250](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105250.zip) On disabling uplink HARQ retransmission and associated LCP impacts MediaTek Inc. discussion R2-2102824

[R2-2105413](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105413.zip) On LCP and DRX impact for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105414](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105414.zip) Discussion on UL scheduling enhancements for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core R2-2103232

[R2-2105431](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105431.zip) LCP restriction for an UL HARQ process Qualcomm Incorporated, Xiaomi, Huawei, HiSilicon, Samsung discussion Rel-17 NR\_NTN\_solutions-Core

R2-2105488 DRX impact of disabling HARQ feedback PANASONIC R&D Center Germany discussion R2-2103446 Withdrawn

R2-2105489 DRX impact of disabling HARQ feedback PANASONIC R&D Center Germany discussion R2-2103446 Withdrawn

[R2-2105490](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105490.zip) DRX impact of disabling HARQ feedback PANASONIC R&D Center Germany discussion R2-2103446

[R2-2105498](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105498.zip) Co-existence issue of BSR over CG and BSR over 2-step RACH PANASONIC R&D Center Germany discussion R2-2103445

[R2-2105528](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105528.zip) LCP enhancement for NTN Spreadtrum Communications discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105529](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105529.zip) Discussion on extending of SR-prohibitTimer Spreadtrum Communications discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105612](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105612.zip) Discussion on remaining MAC issues in NTN Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105698](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105698.zip) Other MAC enhancements in NTN Sony discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105836](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105836.zip) Considerations on LCP in NTN ZTE Corporation, Sanechips discussion Rel-17

[R2-2106047](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106047.zip) UL HARQ RTT timer in NTN InterDigital, MediaTek, Samsung discussion Rel-17 NR\_NTN\_solutions-Core

=> Revised in R2-2106444

R2-2106444 UL HARQ RTT timer in NTN InterDigital, MediaTek, Samsung, ZTE discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106068](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106068.zip) Remaining Issues on HARQ Stalling, RNTI Capacity, UL Scheduling, LCP, and UL HARQ Behaviors for an NTN Samsung Research America discussion

[R2-2106089](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106089.zip) On DRX, LCP, timing, HARQ, SR/BSR, and CG and SPS Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106201](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106201.zip) Discussion on other MAC aspects LG Electronics Inc. discussion NR\_NTN\_solutions-Core

[R2-2106245](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106245.zip) Left Issues for HARQ operation in NTN CMCC discussion Rel-17 NR\_NTN\_solutions-Core

#### 8.10.2.3 RLC and PDCP aspects

Including discussion on the SA2 LS on PDB for new 5QI.

[R2-2104814](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104814.zip) Discussion on PDB for new 5QI OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105837](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105837.zip) Considerations on RLC/PDCP aspects ZTE Corporation, Sanechips discussion Rel-17

[R2-2106016](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106016.zip) RLC and PDCP timers extension NEC Telecom MODUS Ltd. discussion

[R2-2106055](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106055.zip) On RLC t-Reassembly for NTN Sequans Communications discussion Rel-17 NR\_NTN\_solutions-Core R2-2103964

[R2-2106088](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106088.zip) On RLC and PDCP for NTNs Ericsson discussion Rel-17 NR\_NTN\_solutions-Core

### 8.10.3 Control Plane

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

Including TAC update aspects

[R2-2104826](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104826.zip) Signalling Solution for Feeder Link Switching of NTN VODAFONE Group Plc discussion

[R2-2104852](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104852.zip) Discussion on TAC update in NTN CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105117](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105117.zip) Satellite cell ID mapping to earth fixed locations for efficient cell selection and cell reselection in NTN Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105252](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105252.zip) On Soft-switch based Tracking Area Updates in NR-NTN MediaTek Inc. discussion R2-2102826

[R2-2105432](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105432.zip) Hard and soft TAC update timing Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105530](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105530.zip) Discussion on TAC updating in NTN Spreadtrum Communications discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105571](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105571.zip) Discussion on TAC aspects for NTN Beijing Xiaomi Electronics discussion

[R2-2105610](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105610.zip) Discussion on decoupled cell ID Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105611](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105611.zip) Discussion on remaining issues on soft TAU Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106069](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106069.zip) Tracking Area Management using Virtual Tracking Areas in an NTN Samsung Research America, Apple, Rakuten Mobile discussion

[R2-2106070](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106070.zip) Enhancements for the Soft TAC Update for Earth-moving Beams in an NTN Samsung Research America discussion

#### 8.10.3.2 Idle/Inactive mode

Idle/inactive mode specific issues.

Including the outcome of [POST113bis-e][101][NTN] cell reselection (ZTE). No company inputs expected on aspects covered by [POST113bis-e][101]. It's possible to contribute on other aspects, but the discussion will likely be depriorited during this meeting.

[R2-2104805](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104805.zip) Report of [POST113bis-e][101][NTN] cell reselection ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104815](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104815.zip) Discussion on idle/inactive mode procedures in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104857](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104857.zip) Leftover issues on IDLE and inactive mode CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105251](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105251.zip) On Cell-Reselection in NR-NTN MediaTek Inc. discussion R2-2102825

[R2-2105487](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105487.zip) Discussion on IDLE issues Xiaomi communications discussion

[R2-2105531](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105531.zip) Issue on cell selection and reselection in NTN Spreadtrum Communications discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105699](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105699.zip) Idle mode enhancement in NTN Sony discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105786](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105786.zip) Cell reselection based on time and location condition LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105818](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105818.zip) Considerations on ephemeris provision for NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2106171](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106171.zip) NTN Idle/Inactive mode cell re-selection ITL discussion Rel-17

[R2-2106231](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106231.zip) Discussion on GNSS tracking for cell (re)selection and ephemeris division&provision CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106387](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106387.zip) NTN type and scenario indication Convida Wireless discussion

[R2-2106392](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106392.zip) NTN Cell (re)selection enhancements Convida Wireless discussion

#### 8.10.3.3 Connected mode

Connected mode specific issues.

[R2-2104816](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104816.zip) Discussion on mobility management for connected mode UE in NTN OPPO discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104853](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104853.zip) Discussion on connected mode in NTN CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2104999](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104999.zip) Further thoughts on connected mode mobility in NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105000](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105000.zip) Further views on SMTC configurations for NTN Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105006](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105006.zip) Service continuity between NTN and TN Hughes/EchoStar, Thales, BT Plc, Turkcell, Vodafone, ESA, Inmarsat discussion Rel-17

[R2-2105120](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105120.zip) On connected mode issues for NR NTN Apple discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105253](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105253.zip) Mobility for NTN-TN scenarios MediaTek Inc. discussion R2-2102827

[R2-2105383](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105383.zip) Location-based measurement report ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105384](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105384.zip) Discussion on measurement event triggering in NTN ASUSTeK discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105389](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105389.zip) Discussion on UE feedback based SMTC and GAPS measurement configuration Rakuten Mobile, Inc discussion Rel-17

[R2-2105433](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105433.zip) Open issues in CHO Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105434](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105434.zip) SMTC and MG enhancements Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105460](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105460.zip) Discussion on connected mode aspects for NTN Xiaomi Communications discussion

[R2-2105613](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105613.zip) Discussion on remaining issues for CHO in NTN Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105614](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105614.zip) Discussion on service continuity between NTN and TN Huawei, HiSilicon discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105700](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105700.zip) Signaling storm during HOs and Timer based trigger details Sony discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105701](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105701.zip) Cell coverage spillage over multiple countries issue in NTN Sony discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105702](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105702.zip) SMTC enhancement in NTN Sony discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105787](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105787.zip) Further considerations on NTN CHO LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105819](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105819.zip) UE assistance for measurement gap and SMTC configuration in NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2105820](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105820.zip) NTN specific CHO trigger condition Lenovo, Motorola Mobility discussion Rel-17

[R2-2105923](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105923.zip) Further consideration on CHO in NTN ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105936](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105936.zip) Connected mode aspects for NTN Ericsson discussion NR\_NTN\_solutions-Core

[R2-2106024](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106024.zip) Further discussion on CHO in NTN NEC Telecom MODUS Ltd. discussion

[R2-2106045](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106045.zip) Location-based CHO in NTN InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106046](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106046.zip) Time-based CHO for soft feeder-link switch InterDigital discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106071](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106071.zip) Handover Enhancements and Power-saving Neighbor Search for an NTN Samsung Research America discussion

[R2-2106232](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106232.zip) SMTC and measurement Gap configuration for NTN CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106233](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106233.zip) Signaling issues resolution for connected mobility CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106234](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106234.zip) Discussion on NTN-TN mobility CMCC discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106347](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106347.zip) Measurement window enhancements for NTN cell LG Electronics Inc. discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2106386](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106386.zip) SMTC and MG configuration for NTN Convida Wireless discussion

[R2-2106388](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106388.zip) NTN ANR enhancements Convida Wireless discussion

#### 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.

Including discussion on reply LSs on UE location aspects in NTN.

[R2-2104854](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104854.zip) Discussion on reply LSs on UE location aspects in NTN CATT discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105435](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105435.zip) UE positioning methods for NTN Qualcomm Incorporated discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105558](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105558.zip) Discussion on location service for NTN Xiaomi discussion

[R2-2105924](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105924.zip) Understanding on the UE location aspects in NTN ZTE corporation, Sanechips discussion Rel-17 NR\_NTN\_solutions-Core

[R2-2105935](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105935.zip) NTN location reporting aspects Ericsson discussion NR\_NTN\_solutions-Core

[R2-2106072](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106072.zip) Area Management in an NTN Samsung Research America and Thales discussion

## 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.

[R2-2104713](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104713.zip) LS on DL-AoD angle calculation enhancement (R1-2104089; contact: Ericsson) RAN1 LS in Rel-17 NR\_pos\_enh-Core To:RAN2, RAN3

[R2-2104921](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104921.zip) Clarification on work scope of Rel-17 positioning enhancement Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2104925](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104925.zip) Support of angle calculation enhancement for DL-AoD Intel Corporation discussion Rel-17 NR\_pos\_enh

R2-2106092 Clarification on work scope of Rel-17 positioning enhancement Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

R2-2106096 Support of angle calculation enhancement for DL-AoD Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

### 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.

[R2-2104844](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104844.zip) Enhancement for positioning latency vivo discussion NR\_pos\_enh-Core

[R2-2104845](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104845.zip) Discuss Scheduling Location in Advance to reduce Latency vivo discussion NR\_pos\_enh-Core

[R2-2104922](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104922.zip) Scheduled location time based latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh R2-2102849

R2-2105037 Discussion on positioning latency Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105142](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105142.zip) Discussion on scheduled location time for latency reduction CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2105219](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105219.zip) Discussion on positioning latency Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105302](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105302.zip) Discussion on Enhancements for Latency Reduction InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105523](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105523.zip) Further consideration of positioning latency enhancments OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2105557](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105557.zip) Discussion on UE capability regarding positioning latency BEIJING SAMSUNG TELECOM R&D discussion Rel-17

[R2-2105560](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105560.zip) Positioning enhancements on latency reduction Xiaomi discussion

[R2-2105600](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105600.zip) Positioning Latency Reduction Enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2105968](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105968.zip) "For latency reduction Need of QoS info in gNB and positioning capability storage" Ericsson discussion Rel-17

[R2-2105973](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105973.zip) draft LS to different groups Ericsson discussion Rel-17

[R2-2106082](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106082.zip) Scheduling Location in Advance to Reduce Latency Qualcomm Incorporated discussion

R2-2106093 Scheduled location time based latency reduction Intel Corporation discussion Rel-17 NR\_pos\_enh R2-2102849 Withdrawn

[R2-2106261](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106261.zip) Discussion on latency reduction for positioning CMCC discussion Rel-17 NR\_pos\_enh-Core

[R2-2106367](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106367.zip) Latency reduction via configured grant for positioning Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106368](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106368.zip) Discussion on the scheduled location time Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106376](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106376.zip) posSI request enhancement for latency reduction Samsung R&D Institute UK discussion

[R2-2106426](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106426.zip) Discussion on positioning latency reduction ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

R2-2106449 Summary of AI 8.11.2 Latency enhancements CATT discussion Rel-17 NR\_pos\_enh-Core

### 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.

[R2-2104802](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104802.zip) Positioning for UEs in RRC\_INACTIVE state CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2104846](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104846.zip) Discussion on open issues of positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core Withdrawn

[R2-2104847](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104847.zip) Discussion on UL positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core Withdrawn

[R2-2104923](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104923.zip) Support of Positioning in RRC\_INACTIVE Intel Corporation, Apple, OPPO, Xiaomi, InterDigital Inc., Spreadtrum, CATT, Huawei, HiSilicon, ZTE, vivo, Convida Wireless, Nokia discussion Rel-17 NR\_pos\_enh Revised

R2-2105034 Discussion on positioning in RRC INACTIVE state Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

R2-2105041 Draft LS to SA2 on INACTIVE positioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105216](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105216.zip) Discussion on positioning in RRC INACTIVE state Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105222](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105222.zip) Draft LS to SA2 on INACTIVE positioning Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105303](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105303.zip) Discussion on Positioning in RRC INACTIVE state InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105304](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105304.zip) Discussion on Positioning Information reporting using SDT InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105309](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105309.zip) Discussion on Positioning during Mobility in RRC INACTIVE InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105339](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105339.zip) Supporting positioning in RRC\_INACTIVE state OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105340](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105340.zip) Discussion on UL Positioning methods in RRC\_INACTIVE state OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105546](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105546.zip) Discussion on positioning in RRC\_INACTIVE state Spreadtrum Communications discussion Rel-17 NR\_pos\_enh-Core

[R2-2105561](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105561.zip) Discussion on positioning for UEs in RRC Inactive Xiaomi discussion

[R2-2105601](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105601.zip) On Positioning in RRC\_INACTIVE state Lenovo, Motorola Mobility discussion Rel-17

[R2-2105703](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105703.zip) Considerations on positioning RRC Inactive Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2105710](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105710.zip) Considerations on Assistance data for positioning in RRC\_INACTIVE mode. Fraunhofer IIS; Fraunhofer HHI discussion

[R2-2105971](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105971.zip) On Maximizing benefits of SDT Ericsson discussion Rel-17

[R2-2106083](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106083.zip) Positioning of UEs in RRC Inactive State Qualcomm Incorporated discussion

R2-2106094 Support of Positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

[R2-2106104](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106104.zip) Support of UL and RAT independent positioning in RRC\_INACTIVE Intel Corporation discussion Rel-17 NR\_pos\_enh

[R2-2106369](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106369.zip) Support of positioning result reporting in Inactive state Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106408](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106408.zip) Discussion on UL positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core

[R2-2106409](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106409.zip) Discussion on open issues of positioning support in RRC\_INACTIVE state vivo discussion NR\_pos\_enh-Core

[R2-2106429](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106429.zip) Discussion on DL INACTIVE positioning ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106430](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106430.zip) Discussion on MG for INACTIVE positioning ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106434](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106434.zip) Support of Positioning in RRC\_INACTIVE Intel Corporation, Apple, OPPO, Xiaomi, InterDigital Inc., Spreadtrum, CATT, Huawei, HiSilicon, ZTE, vivo, Convida Wireless, Nokia discussion Rel-17 NR\_pos\_enh [R2-2104923](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104923.zip) Late

R2-2106447 Summary of AI 8.11.3 for INACTIVE POS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

### 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.

[R2-2104803](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104803.zip) Further discussion on on-demand PRS CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2104848](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104848.zip) Discuss on-demand PRS vivo discussion NR\_pos\_enh-Core

[R2-2104924](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104924.zip) Support of on-demand PRS request Intel Corporation discussion Rel-17 NR\_pos\_enh

R2-2105035 Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

R2-2105040 Stage-2 TP for on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105134](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105134.zip) Discussion on UE-initiated on-demand PRS Apple discussion Rel-17 NR\_pos\_enh-Core

[R2-2105217](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105217.zip) Discussion on on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105221](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105221.zip) Stage-2 TP for on-demand PRS Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105305](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105305.zip) Discussion on procedures for On-demand PRS for DL-based positioning InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105306](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105306.zip) Discussion on procedure for On-demand PRS for DL+UL based positioning InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105338](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105338.zip) Discussion on on-demand DL-PRS OPPO discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105547](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105547.zip) Discussion on on-demand PRS Spreadtrum Communications discussion Rel-17 NR\_pos\_enh-Core

[R2-2105562](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105562.zip) Positioning enhancement to on-demand DL PRS Xiaomi discussion

[R2-2105603](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105603.zip) On-Demand DL-PRS Support Lenovo, Motorola Mobility discussion Rel-17

[R2-2105704](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105704.zip) Considerations on positioning PRS On-demand Sony discussion Rel-17 NR\_pos\_enh-Core

[R2-2105734](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105734.zip) On-demand PRS Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 R2-2103564

[R2-2105969](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105969.zip) On demand PRS Ericsson discussion Rel-17

[R2-2106084](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106084.zip) On-Demand DL-PRS Qualcomm Incorporated discussion

R2-2106095 Support of on-demand PRS request Intel Corporation discussion Rel-17 NR\_pos\_enh Withdrawn

[R2-2106354](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106354.zip) UE feedback for on-demand PRS Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2106355](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106355.zip) Pre-configuration and initiation of on-demand PRS associated with QoS/radio conditions Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_pos\_enh-Core

[R2-2106370](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106370.zip) Support of on-demand DL PRS for positioning efficiency Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106379](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106379.zip) On-demand DL PRS transmission and reception Convida Wireless discussion

[R2-2106424](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106424.zip) Discussion on restriction of on demand PRS ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106425](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106425.zip) Discussion on on demand PRS ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

### 8.11.5 GNSS positioning integrity

Signalling, and procedures to support GNSS positioning integrity determination.

[R2-2104843](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104843.zip) Discussion on methodologies for network-assisted and UE-assisted integrity vivo discussion NR\_pos\_enh-Core

R2-2105036 Discussion on network-assisted and UE-assisted integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105218](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105218.zip) Discussion on network-assisted and UE-assisted integrity Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105308](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105308.zip) Discussion on procedures and signalling for GNSS positioning integrity InterDigital, Inc. discussion Rel-17

[R2-2105524](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105524.zip) Discussion on supporting positioning integrity in RAN OPPO discussion Rel-17 NR\_pos\_enh-Core

[R2-2105563](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105563.zip) Discussion on signalling and procedures for GNSS positioning integrity Xiaomi discussion

[R2-2105735](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105735.zip) UE-aided detection of threat to GNSS systems and assistance data signaling Fraunhofer IIS; Fraunhofer HHI; Ericsson discussion

[R2-2105874](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105874.zip) Positioning Integrity Support in LPP Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_NR\_pos\_enh

[R2-2105970](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105970.zip) On GNSS Integrity Ericsson discussion Rel-17

[R2-2105985](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105985.zip) Guiding framework on integrity concepts for A-GNSS positioning ESA discussion Rel-17 NR\_pos\_enh

[R2-2106085](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106085.zip) Considerations on GNSS positioning integrity support Qualcomm Incorporated discussion

[R2-2106105](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106105.zip) Proposals on GNSS integrity assistance information Swift Navigation discussion

[R2-2106371](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106371.zip) Consideration on the signalling design for Positioning Integrity Samsung Electronics discussion NR\_pos\_enh-Core

[R2-2106427](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106427.zip) Discussion on positioning integrity transportation ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

[R2-2106428](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106428.zip) Discussion on positioning integrity data calculation and LS to RTCM ZTE Corporation, Sanechips discussion Rel-17 NR\_pos\_enh-Core

### 8.11.6 A-GNSS enhancements

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

[R2-2105143](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105143.zip) Introduction of B2a signal in BDS system in A-GNSS CATT, CAICT draftCR Rel-17 37.355 16.4.0 B NR\_pos\_enh-Core

[R2-2105972](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105972.zip) Impacts of NavIC in NR RRC Ericsson discussion Rel-17

### 8.11.7 Other

Input on other WI objectives.

[R2-2104804](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104804.zip) Discussion on LS on DL-AoD angle calculation enhancement CATT discussion Rel-17 NR\_pos\_enh-Core

[R2-2104849](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104849.zip) Discussion on DL-AoD angle calculation enhancement vivo discussion NR\_pos\_enh-Core

R2-2105038 Discussion on positioning enhancement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core Withdrawn

[R2-2105220](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105220.zip) Discussion on positioning enhancement Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2105309](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105309.zip) Discussion on Positioning during Mobility in RRC INACTIVE InterDigital, Inc. discussion Rel-17 NR\_pos\_enh

[R2-2105974](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105974.zip) On High Accuracy Aspects Ericsson discussion Rel-17

[R2-2106086](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106086.zip) Signalling and Procedures for supporting Reference Location Devices Qualcomm Incorporated discussion

## 8.12 Reduced Capability

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

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.

[R2-2104702](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104702.zip) Reply LS on Unified Access Control (UAC) for RedCap (C1-212395; contact: vivo) CT1 LS in Rel-17 NR\_redcap-Core To:RAN, RAN2 Cc:SA1

[R2-2105233](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105233.zip) Revised WI work plan for RedCap Ericsson discussion NR\_redcap-Core

### 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

Definition of one RedCap UE type and related UE capability design.

How to constrain the use of RedCap capabilities only for RedCap UEs and prevent RedCap UEs from using capabilities not intended for RedCap UEs.

[R2-2104774](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104774.zip) Definition and constrained use of RedCap UEs Qualcomm Incorporated discussion Rel-17 FS\_NR\_redcap

[R2-2104808](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104808.zip) Discussion on constraining of reduced capabilities OPPO discussion Rel-17 NR\_redcap-Core

[R2-2104910](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104910.zip) UE type definition and constraining for RedCap UEs vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap

[R2-2104927](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104927.zip) RedCap UE capability and constraining of reduced capabilities Intel Corporation discussion Rel-17 NR\_redcap

[R2-2105136](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105136.zip) Resolution on some basic mandatory capabilities for RedCap UEs for faster product development Apple Inc discussion Rel-17 NR\_redcap-Core

[R2-2105160](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105160.zip) Define and Constrain Reduced Capability for RedCap ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core

[R2-2105234](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105234.zip) Definition of RedCap UE and first look on capability signaling Ericsson discussion NR\_redcap-Core

[R2-2105319](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105319.zip) On Redcap UE capabilities and type CATT discussion Rel-17 NR\_redcap-Core

[R2-2105471](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105471.zip) Capability for RedCap UEs and its early indication Samsung discussion Rel-17 FS\_NR\_redcap

[R2-2105539](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105539.zip) Discussion on L2 buffer size reduction for Redcap UE Spreadtrum Communications discussion Rel-17 NR\_redcap-Core

[R2-2105634](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105634.zip) Definition of RedCap UE type and reduced capabilities Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2105882](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105882.zip) How to prevent RedCap UEs from using capabilities not intended for RedCap Ues LG Electronics UK discussion Rel-17

[R2-2105910](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105910.zip) On RedCap UE capabilities Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2106053](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106053.zip) Constraint of RedCap UE to intended use cases InterDigital discussion Rel-17 NR\_redcap-Core

R2-2106098 RedCap UE capability and constraining of reduced capabilities Intel Corporation discussion Rel-17 NR\_redcap Withdrawn

[R2-2106230](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106230.zip) Discussion on the definition and constraining of reduced capabilities CMCC discussion Rel-17 NR\_redcap

[R2-2106276](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106276.zip) The capability and the constrain of RedCap UE China Telecommunications discussion

#### 8.12.2.2 Identification, access and camping restrictions

Early identification of RedCap UEs (e.g. msg1/msgA vs msg3).

System information indication for camping restrictions.

[R2-2104775](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104775.zip) Access and camping restrictions for RedCap UEs Qualcomm Incorporated discussion Rel-17 FS\_NR\_redcap

[R2-2104777](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104777.zip) Discussion on early identification and SI indication CAICT discussion Rel-17

[R2-2104790](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104790.zip) NR-REDCAP identification and SI indication THALES discussion

[R2-2104809](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104809.zip) Discussion on RedCap UE’s access control OPPO discussion Rel-17 NR\_redcap-Core

[R2-2104911](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104911.zip) Identification and access restrictions for RedCap UEs vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap R2-2102859

[R2-2104928](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104928.zip) Early identification and camping restrictions for RedCap UE Intel Corporation discussion Rel-17 NR\_redcap

[R2-2105014](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105014.zip) Methods for barring and for capability reporting Sierra Wireless, S.A. discussion

[R2-2105071](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105071.zip) Discussion on UAC for Redcap devices Xiaomi Communications discussion

[R2-2105072](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105072.zip) Discussion on Identification and UE access restrictions for Redcap devices Xiaomi Communications discussion

[R2-2105137](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105137.zip) Power-saving aspects from cell access and camping of RedCap UEs Apple Inc discussion Rel-17 NR\_redcap-Core

[R2-2105161](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105161.zip) Identification and Access Restriction for RedCap ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core

[R2-2105235](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105235.zip) Early indication & access restriction for RedCap UEs Ericsson discussion NR\_redcap-Core

[R2-2105320](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105320.zip) Early Identification and camping restrictions for Redcap UEs CATT discussion Rel-17 NR\_redcap-Core

[R2-2105399](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105399.zip) Camping restrictions of RedCap UE Fujitsu discussion Rel-17 NR\_redcap-Core

[R2-2105443](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105443.zip) Camping restriction and cell selection criterion DENSO CORPORATION discussion Rel-17 NR\_redcap-Core R2-2102947

[R2-2105472](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105472.zip) Access control for RedCap UEs Samsung discussion Rel-17 FS\_NR\_redcap

[R2-2105540](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105540.zip) Discussion on early indication design for Redcap UE Spreadtrum Communications discussion Rel-17 NR\_redcap-Core

[R2-2105635](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105635.zip) Identification and access restriction of RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2105793](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105793.zip) Early identification and SI indication NEC discussion Rel-17 NR\_redcap-Core R2-2103506

[R2-2105814](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105814.zip) Cell barring for REDCAP UEs Lenovo, Motorola Mobility discussion Rel-17

[R2-2105879](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105879.zip) Access for REDCAP UE Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2105883](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105883.zip) Identification and access restrictions of RedCap Ues LG Electronics UK discussion Rel-17

[R2-2105957](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105957.zip) Discussion on access and camping restrictions for RedCap UEs Futurewei Technologies discussion Rel-17 NR\_redcap-Core

[R2-2106052](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106052.zip) Identification and restriction of RedCap UE InterDigital discussion Rel-17 NR\_redcap-Core R2-2103973

R2-2106099 Early identification and camping restrictions for RedCap UE Intel Corporation discussion Rel-17 NR\_redcap Withdrawn

[R2-2106243](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106243.zip) Access control for RedCap UEs cmcc discussion Rel-17 NR\_redcap-Core

[R2-2106244](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106244.zip) Discussion on early identification cmcc discussion Rel-17 NR\_redcap-Core

[R2-2106274](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106274.zip) Early identification and camping restrictions of RedCap UE China Telecommunications discussion

### 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

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

This agenda item may be deprioritized during this meeting. Company contributions are possible but, if there will be time, the discussion will likely focus only on:

* Resolving the FFS in: "At least for eDRX cycle, the configurations of the eDRX for RRC\_IDLE and RRC\_INACTIVE can be different (FFS for PTW, e.g. length and starting point, when eDRX cycles are longer than 10.24s)"
* Discussing the minimum value allowed for the eDRX cycle

[R2-2104810](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104810.zip) Discussion on eDRX for RedCap UEs OPPO discussion Rel-17 NR\_redcap-Core

[R2-2104912](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104912.zip) Discussion on eDRX for RedCap UEs vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap

[R2-2104929](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104929.zip) Leftover issues for eDRX Intel Corporation discussion Rel-17 NR\_redcap

[R2-2105070](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105070.zip) Discussion on e-DRX for Redcap Devices Xiaomi Communications discussion

[R2-2105135](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105135.zip) RedCap UE power-saving with 2.56 DRX cycle Apple Inc, FaceBook Inc, MediaTek Inc discussion Rel-17 NR\_redcap-Core R2-2103887

[R2-2105162](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105162.zip) On eDRX for RedCap ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core

[R2-2105236](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105236.zip) PTW configuration and minimum cycle length for eDRX Ericsson discussion NR\_redcap-Core

[R2-2105321](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105321.zip) Discussion on eDRX for NR RRC Inactive and Idle CATT discussion Rel-17 NR\_redcap-Core

[R2-2105464](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105464.zip) Open issues on eDRX cycles DENSO CORPORATION discussion Rel-17 NR\_redcap-Core

[R2-2105636](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105636.zip) eDRX for RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2105671](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105671.zip) Remaining issues for eDRX MediaTek Inc. discussion Rel-17 NR\_redcap-Core R2-2103783

[R2-2105813](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105813.zip) Consideration on eDRX for RedCap UE Lenovo, Motorola Mobility discussion Rel-17

[R2-2105869](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105869.zip) eDRX for REDCAP Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2105881](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105881.zip) Support for eDRXs for RRC Inactive and Idle LG Electronics UK discussion Rel-17

R2-2106100 Leftover issues for eDRX Intel Corporation discussion Rel-17 NR\_redcap Withdrawn

#### 8.12.3.2 RRM relaxations

Continue the investigation of RRM measurement relaxation criteria for neighbouring cells, with the intention to provide recommendation for a WID update for the RRM relaxations objective.

Including the outcome of [POST113bis-e][102][RedCap] RRM relaxations (Qualcomm). No company inputs expected on aspects covered by [POST113bis-e][102]. Company contributions should focus on the measurement-based R17 stationarity criterion and the related not-at-cell-edge criterion.

[R2-2104776](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104776.zip) RRM measurement relaxations for stationary UEs Qualcomm Incorporated discussion Rel-17 FS\_NR\_redcap

[R2-2104811](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104811.zip) Discussion on RRM relax for RedCap UEs OPPO discussion Rel-17 NR\_redcap-Core

[R2-2104913](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104913.zip) RRM relaxation for neighboring cell for RedCap UEs vivo, Guangdong Genius discussion Rel-17 FS\_NR\_redcap

[R2-2104926](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104926.zip) RRM measurement relaxation criteria for RedCap devices Intel Corporation discussion Rel-17 NR\_redcap R2-2102853

[R2-2105138](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105138.zip) Confined Mobility impact on RRM Relaxation Apple Inc discussion Rel-17 NR\_redcap-Core

[R2-2105159](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105159.zip) RRM relaxation for RedCap UEs ZTE Corporation, Sanechips discussion Rel-17 NR\_redcap-Core

[R2-2105229](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105229.zip) RRM Relaxation for RedCap UE NTT DOCOMO INC. discussion

R2-2105237 Triggering conditions for Rel-17 RRM relaxation Ericsson discussion NR\_redcap-Core Withdrawn

[R2-2105246](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105246.zip) RRM Relaxation Ericsson discussion Rel-17 NR\_redcap-Core

[R2-2105296](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105296.zip) Discussion on RRM relaxations for RedCap UE Xiaomi Communications discussion Rel-17 NR\_redcap

[R2-2105418](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105418.zip) Summary of [Post103bis-e][102][REDCAP] RRM relaxations (Qualcomm) Qualcomm Wireless GmbH discussion Rel-17

[R2-2105521](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105521.zip) RRM relaxation in RRC\_CONNECTED for RedCap UEs SHARP Corporation discussion R2-2103206

[R2-2105637](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105637.zip) RRM measurement relaxation for RedCap UE Huawei, HiSilicon discussion Rel-17 NR\_redcap-Core

[R2-2105705](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105705.zip) Redcap relaxed measurements and number of beams Sony discussion Rel-17 NR\_redcap-Core

[R2-2105706](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105706.zip) RedCap Relaxed measurements, stationary definition Sony discussion Rel-17 NR\_redcap-Core

[R2-2105788](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105788.zip) RRM relaxation for stationary RedCap Ues LG Electronics Inc. discussion Rel-17 NR\_redcap-Core

[R2-2105812](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105812.zip) RRM relaxation for stationary UE with reduced capability Lenovo, Motorola Mobility discussion Rel-17

[R2-2105909](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105909.zip) On RRM relaxations for REDCAP Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_redcap-Core

[R2-2105959](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105959.zip) Discussion on R17 stationarity criterion and not-at-cell-edge criterion for RedCap UEs Futurewei Technologies discussion Rel-17 NR\_redcap-Core

R2-2106097 RRM measurement relaxation criteria for RedCap devices Intel Corporation discussion Rel-17 NR\_redcap R2-2102853 Withdrawn

[R2-2106229](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106229.zip) Discussion on the RRM relaxation for RedCap Ues CMCC discussion Rel-17 NR\_redcap

[R2-2106272](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106272.zip) RRM relaxation of RedCap UE China Telecommunications discussion

[R2-2106403](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106403.zip) RRM relaxation criteria in RRC\_Idle/Inactive Samsung discussion Rel-17

[R2-2106404](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106404.zip) RRM relaxation criteria in RRC\_Connected Samsung discussion Rel-17

## 8.13 SON MDT

(NR\_ENDC\_SON\_MDT\_enh-Core; leading WG: RAN3; REL-17; WID: RP-201281)

Time budget: 0.5 TU

Tdoc Limitation: 3 tdocs

Email max expectation: 3 threads

### 8.13.1 Organizational

### 8.13.2 SON

Company contributions should focus on FFS issue which left from 113bis.

#### 8.13.2.1 Handover related SON aspects

[R2-2104930](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104930.zip) Further Discussion on CHO and DAPS Aspects CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105197](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105197.zip) Further discussion on SON of CHO China Telecommunication discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105198](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105198.zip) Views on the left issues related to SON of DAPS China Telecommunication discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105333](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105333.zip) Discussion on CHO and DAPS enhancements vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105446](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105446.zip) Discussion on signalling aspects of successful handover report NEC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105476](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105476.zip) Further clarifications on MRO Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core R2-2103550

[R2-2105522](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105522.zip) Further consideration of SON of HO related aspects OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105804](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105804.zip) SON Enhancements for CHO Lenovo, Motorola Mobility discussion Rel-17

[R2-2105805](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105805.zip) SON Enhancements for DAPS Handover Lenovo, Motorola Mobility discussion Rel-17

[R2-2105806](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105806.zip) SON Enhancement for NR-U Lenovo, Motorola Mobility discussion Rel-17

[R2-2105838](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105838.zip) Remaining issues on HO related SON aspects ZTE Corporation, Sanechips discussion Rel-17

[R2-2105862](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105862.zip) Discussion on handover related SON aspects Huawei, HiSilicon discussion Rel-17

[R2-2106010](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106010.zip) HO related SON changes QUALCOMM Incorporated discussion Rel-17

[R2-2106025](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106025.zip) Handover-related SON aspects Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2106060](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106060.zip) Remaining handover SON aspects, also covering multiple events Samsung Telecommunications discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2106134](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106134.zip) Discussion on RLF report for DAPS SHARP discussion NR\_ENDC\_SON\_MDT\_enh-Core R2-2104070

[R2-2106136](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106136.zip) Successful HO report in DAPS SHARP discussion NR\_ENDC\_SON\_MDT\_enh-Core R2-2104071

[R2-2106235](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106235.zip) SON Enhancement for CHO, DAPS and Successful HO Report CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2106384](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106384.zip) Further considerations on HO related SON issues LG Electronics Deutschland discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

#### 8.13.2.2 2 step RA related SON aspects

[R2-2104931](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104931.zip) Further Discussion on RACH Report for 2-step RACH CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105334](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105334.zip) Discussion on signalling and content of 2-stepRA report vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105466](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105466.zip) Discussion on 2-step RACH reporting in SON OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105477](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105477.zip) Remaining Issues and New Aspects in 2-step NR UE Report Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105839](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105839.zip) Remaining issues on RA related enhancements ZTE Corporation, Sanechips discussion Rel-17

[R2-2105863](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105863.zip) Discussion on 2 step RA related SON aspects Huawei, HiSilicon discussion Rel-17

[R2-2106026](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106026.zip) 2-Step RA information for SON purposes Ericsson discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2106036](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106036.zip) On logging of on-demand SI information QUALCOMM Incorporated discussion Rel-17

[R2-2106133](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106133.zip) Discussion on RA information for 2-step RA SHARP discussion NR\_ENDC\_SON\_MDT\_enh-Core R2-2104057

[R2-2106236](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106236.zip) SON Enhancement for 2-step RA CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

#### 8.13.2.3 Other WID related SON features

This AI will not be treated at this meeting and no input is expected.

[R2-2106185](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106185.zip) SON Enhancements for 2SRA, Successful HO Report and Others Samsung discussion NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2106237](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106237.zip) Further consideration on UL-DL coverage mismatch CMCC discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

### 8.13.3 MDT

#### 8.13.3.1 Immediate MDT enhancements

This AI will not be treated at this meeting and no input is expected.

#### 8.13.3.2 Logged MDT enhancements

[R2-2104932](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104932.zip) Consideration on MDT Enhancements for On-demand SI CATT discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105335](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105335.zip) Discussion on Logged MDT configuration vivo discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105478](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105478.zip) Logged MDT and other enhancements Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

R2-2105616 Consideration of enhancements for logged MDT OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core Late

[R2-2105625](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105625.zip) Consideration of enhancements for logged MDT OPPO discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2105840](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105840.zip) Remaining issues on logged MDT ZTE Corporation, Sanechips discussion Rel-17

[R2-2105884](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105884.zip) Discussion on FFS issues LG Electronics UK discussion Rel-17

[R2-2106004](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106004.zip) On logged MDT related enhancements Ericsson discussion

[R2-2106037](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106037.zip) Logged measurement Enhancements QUALCOMM Incorporated discussion Rel-17

[R2-2106057](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106057.zip) R17 Logged MDT issues (on overwrite, IRAT/ MR-DC, logging non camping freqs, IDC and OSI) Samsung Telecommunications discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

[R2-2106152](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106152.zip) Discussion on logged MDT enhancements Huawei, HiSilicon discussion Rel-17 NR\_ENDC\_SON\_MDT\_enh-Core

### 8.13.4 L2 Measurements

This AI will not be treated at this meeting and no input is expected.

## 8.14 NR QoE

(NR\_QoE-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.

[R2-2105895](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105895.zip) Running RRC CR for QoE measurements Ericsson draftCR Rel-17 38.331 16.4.1

- Ericsson explains that this hasn’t been reviewed.

- Lenovo wonder if we need a stage-2 CR as well.

- Apple think Stage-2 CR is good.

- Chair think that the Wi rapporteur then can propose way forward. Can maybe have also stage-2 running CR for short email.

* Short Post email discussion incl agreements from this meeting.

### 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

[R2-2106653](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106653.zip) [AT114-e][026] Configuration Reporting General Qualcomm

DISCUSSION

P 1, 2, 3, 5, 6, 7 15

- Huawei think for P5 whether we need to capture the FFS part. Chair think we can clarify then.

- LG think “concerned application’ shall be changed to “upper layer”. Nokia agree with LG and think “the concerned application” is unclear. QC think upper layer is too generic.

- Ericsson think we can use “the application layer”, Oppo think “upper layer” is used for LTE.

- Samsung has a concern for P15. Think we first need to discuss how to retrieve data ehwn paused. CATT agrees with Samsung, cannot exclude MDT for report retrieval.

- Nokia think for P15, if we used some part but not all of MDT framework is strange, then which part would we use vs exclude. QC think that logged MDT framework refer to UE retrieval, this this was already agreed and this is just confirmation.

- Huawei agrees that P15 is ok as we will not do measurments in Idle or inactive. ZTE are ok with P15, and think it was already agreed.

- on P15, CATT think that pause resume changes things, and think that after pause resume this can be used. Just a proposal for now.

- QC point out that for QoE reporting we use SRB4 etc, so this is different to logged MDT.

- P15 China Unicom think that for R17 MDT is not in scope, but think we can discuss

P4

- QC confirms that this is for RRC.

P8

- ZTE has a differnet view, think there is no consensus. Can send LS. Nokia agrees, it was not concluded to have several configurations per service type.

- Lenovo think it doesn’t matter to RRC, think this is not prohibited for LTE.

- Chair wonder if we then should ask how many containers RRC should support (per service type).

- LG think this matter to our design as it matters to whether we use abbreviated ID or not, abd think we should ask.

- Chair: we agreed earlier to support multiple (but not per service type), right. Nokia and Ericsson confirms.

P9/10

- QC think SA5 already indicated that gNB need to use ref ID.

- LG would be ok with 9 10

- Ericsson wonder if it can just be the add/mod ID. IF that is the case then OK, otherwise not.

- Oppo think that only service type earlier included in the RRC. Point that maybe this is sufficient.

- QC think we already agree to have the shorter ID.

- Huawei think P9 and P10 is R2 consensus.

- Nokia think we agreed to have an ID. Nokia think we’d need this for reporting, but maybe not, if the UE is always connected. Maybe not a huge overhead. Ericsson think that this is needed for routing the report to the receiver, think RRC ID is futureproof then we can distringuish multiple measurements.

- Nokia think that maybe the short ID cannot be used for Idle or when network loses the context.

- CATT think AS layer in the UE can map short ID/ref ID. Should maybe ask SA5 anout the expected handling in the UE for this ID.

- Huawei point out that addmod list always have a ID in any case.

- Chair: Wait with this discussion.

P11/P12

- Nokia think the discussion offline concluded that we don’t need more than 8kB. We don’t need to ask openly, just inform. QC think offline there were split views and we should ask, Erisson agrees that we should ask.

P13/14

- For P13 LG think that this dep on Pause storage. Think we don’t need complex structure in RRC. Chair: postpone this discussion, to discuss with later CR updates.

- P14, chair think this is a late Q for a WI, lets wait.

* gNB can release a list of QoE measurement configurations in one RRCReconfiguration message.
* If a QoE measurement configuration is released, RRC layer informs the upper layer to release the QoE measurement configuration. This could be revisited based on other issues’ progress.
* If the UE enters IDLE state, UE should release all of the QoE measurement configurations.
* QoE configuration and report are encapsulated in a transparent container in the RRC messages. It is FFS for RAN-visible QoE configuration and report (dep on R3).
* At lease service type and RRC level ID (Reference ID or shorten ID) together with corresponding QMC configuration container should be included for each QoE configuration in RRCReconfiguration message when the network setups QoE measurement to the UE.
* At least RRC level ID (Reference ID or shorten ID) together with corresponding QMC report container should be included in MeasReportAppLayer message for each QoE report.
* RAN2 confirms logged MDT framework for QoE data retrieval and reporting is not supported in Rel-17.
* RAN2 assumes that QoE configuration modification does not need to be supported from RAN2 signalling point of view (in RRC), and send LS to SA5/SA4 to confirm the assumption.
* Send LS to SA4/SA5/RAN3 ask whether multiple QoE measurement configurations can be configured for a certain service type.
* RAN2 assumes to re-use the maximum container size of 1000 bytes for QoE measurements configuration and send LS to SA4 to confirm the assumption.
* Send LS to SA4 to check the necessity of the maximum container size of QoE measurements report beyond than 8000 bytes.

Can continue in this discussion on the LS

* [AT114-e][026][QoE] Configuration Reporting General (Qualcomm)

Scope: LS out

Intended outcome: Approved LS out

Deadline: EOM (no CB)

[R2-2104994](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104994.zip) QoE confiugration and reporting Qualcomm Incorporated discussion NR\_QoE-Core

[R2-2105214](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105214.zip) Further discussion on QoE measurement collection in NR standalone Lenovo, Motorola Mobility discussion Rel-17 NR\_QoE-Core

[R2-2105336](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105336.zip) Discussion on QoE measurement configuration vivo discussion Rel-17

[R2-2105479](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105479.zip) QoE configuration and general ascpects Nokia, Nokia Shanghai Bell discussion Rel-17

Moved Here

[R2-2105526](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105526.zip) Discussion on QoE measurement collection in NR OPPO discussion Rel-17 FS\_NR\_QoE

[R2-2105580](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105580.zip) Discussion on QoE measurement configuration and reporting Huawei, HiSilicon discussion Rel-17 NR\_QoE-Core

[R2-2105893](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105893.zip) Configuration and reporting of QoE measurements Ericsson discussion

[R2-2106061](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106061.zip) Harmonised general framework for QoE measurements Samsung Telecommunications discussion Rel-17

[R2-2106167](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106167.zip) Discussion on NR QoE configuration CATT discussion NR\_QoE-Core

[R2-2106220](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106220.zip) Further discussion on configuration and reporting CMCC discussion Rel-17

[R2-2106348](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106348.zip) QoE measurement configuration LG Electronics Inc. discussion Rel-17

[R2-2106402](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106402.zip) Issues for NR QoE measurement Samsung discussion Rel-17

[R2-2106432](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106432.zip) Discussion on NR QoE configuration ZTE Corporation, Sanechips discussion Rel-17

#### 8.14.2.2 Start and Stop

Activation Deactivation Pause Resume

[R2-2106661](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106661.zip) Report from email discussion [AT114-e][027][QoE] Start and Stop Lenovo

DISCUSSION

- Lenovo proposes to treat P1 2 4 5

- Chair agrees w P3

P2

- Chair think Option 2 is the default, mode complexity only if needed.

- Samsung htikn tht the network can be sleelctive wirt wich UEs are paused if needed, no need to fine granularity. Support option 2. LG agrees with Samsung.

- Nokia support Option 2. Apple agrees as well, and think RAN overload is rare. Apple think O1 may bring lots of work in other groups to understand which configurations should be prioritized.

- QC think O1 is important, e.g. for different slice or for differnet service type, ZTE support option 1, think also the wording of the proposal need to be modified. CATT and CMCC as well, China Unicom support O1

- Huawei think that O1 is useful at resuming to restart slowly.

P4/P5

- Lenovo indicate that we need to ask about whether to store reports in the AS or the application layer.

- Chair think that if we cannot even agree to send LS, then we either remove the pause resume functionality altogether OR we support it in the AS layers.

- QC think that SA5 has already specified that application layer shall store this. SA4 has put this task to RAN2. Support to send LS. Ericsson support to send LS, Ericsson too.

- Apple think that this discussion may be academic. Can maybe leave it to UE implementaition think we need to specify the amount of storage. Huawei think there is storage capacity limitation for modem layer.

- Oppo think the storage capacity of AS layer is very limited and likely to discard.

- Intel prefer AS layer.

- Chair wonder if we can agree on storage limitation.

- Ericsson prefer not. Samsung also think this is not important.

- Ericsson think there is a security issue, as the application would become aware about an overload situation. Samsung would like to ask SA groups on this.

* At reception of QoE release, the UE shall discard any unsent QoE reports corresponding to the released QoE configuration.
* FFS whether pause resume will affect all configurations or whether pause resume can act selectively per configuration.
* On whether to store reports in the AS or the application layer at Pause, Send LS to SA4/SA5/SA3 to inform them about the options and their pros/cons (if possible) and ask them for feedback. RAN2 will continue work on this topic based on the feedback received.

Can continue in this discussion on the LS

* [AT114-e][027][QoE] Start and Stop (Lenovo)

Scope: LS out

Intended outcome: Approved LS out

Deadline: EOM (no CB)

[R2-2104992](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104992.zip) QoE pause and resume handling Qualcomm Incorporated discussion NR\_QoE-Core

[R2-2105215](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105215.zip) QoE report handling during RAN overload Lenovo, Motorola Mobility discussion Rel-17 NR\_QoE-Core

[R2-2105337](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105337.zip) Discussion on start and stop of QoE measurement vivo discussion Rel-17

[R2-2105525](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105525.zip) Discussion on QoE measurement pausing and resuming OPPO discussion Rel-17 FS\_NR\_QoE

[R2-2105581](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105581.zip) QoE measurement handling at RAN overload Huawei, HiSilicon discussion Rel-17 NR\_QoE-Core

[R2-2105646](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105646.zip) Discussion on NR QoE China Unicom discussion NR\_QoE-Core

[R2-2105894](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105894.zip) Pause and resume of QoE measurements Ericsson discussion

[R2-2105920](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105920.zip) QoE reporting control Nokia, Nokia Shanghai Bell discussion Rel-17

[R2-2106159](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106159.zip) Discussion on QoE collection start and stop CATT discussion NR\_QoE-Core

[R2-2106222](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106222.zip) Further discussion on start and stop CMCC discussion Rel-17

[R2-2106346](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106346.zip) Stop and start for QoE measurement reporting LG Electronics Inc. discussion Rel-17

[R2-2106431](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106431.zip) Discussion on pause/resume NR QoE reporting ZTE Corporation, Sanechips discussion Rel-17

### 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: 3 tdocs

Email max expectation: 3 threads

### 8.15.1 Organizational

Including incoming LSs, rapporteur inputs, etc.

### 8.15.2 SL DRX

Including remaining proposals from [POST113-e][703], [POST113-e][704], [AT113bis-e][706], [AT113bis-e][707], and [AT113bis-e][708].

[R2-2104750](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104750.zip) Leftover Issues on DRX for Sidelink Unicast CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2104751](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104751.zip) DRX Design for Sidelink Groupcast and Broadcast CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2104752](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104752.zip) [AT113bis-e][707][V2X/SL] Uu DRX Impact to Support SL CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2104769](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104769.zip) Discussion on network involvement for SL related DRX OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2104835](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104835.zip) Discussion on DRX configuration and DRX timers OPPO discussion Rel-17 NR\_SL\_enh-Core

[R2-2104836](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104836.zip) Left issues on SL DRX RTT timer OPPO, Intel, Xiaomi communications discussion Rel-17 NR\_SL\_enh-Core

[R2-2104841](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104841.zip) Summary of [POST113-e][704] TX UE centric or RX UE centric DRX configuration determination (OPPO) OPPO report Rel-17 NR\_SL\_enh-Core R2-2102889

[R2-2104865](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104865.zip) Reviised Summary of [POST113-e][703][V2X/SL] Details of Timer (InterDigital) InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2104866](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104866.zip) Open Issues on SL DRX InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2104867](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104867.zip) On TX Centric vs RX Centric Approaches for DRX Configuration Determination InterDigital, Apple, Huawei discussion Rel-17 NR\_SL\_enh-Core

[R2-2105023](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105023.zip) Further discussion on SL DRX operation Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2105024](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105024.zip) On DRX wake-up time alignment Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2105073](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105073.zip) DRX Configuration for UC BC GC and its interaction with Sensing Lenovo, Motorola Mobility discussion NR\_SL\_enh-Core

[R2-2105077](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105077.zip) Discussion on SL DRX configuration ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2105078](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105078.zip) Discussion on SL DRX timer ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2105083](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105083.zip) Consideration on the sidelink DRX for unicast Huawei, HiSilicon discussion Rel-17 NR\_SL\_enh-Core

[R2-2105131](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105131.zip) Discussion on RX-centric and Tx-centric in SL unicast DRX Apple, InterDigtal Inc. discussion Rel-17 NR\_SL\_enh-Core

[R2-2105132](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105132.zip) Discussion on remaining issues of SL DRX Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2105248](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105248.zip) NR SL DRX Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2105277](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105277.zip) Discussion on co-existence with UEs not supporting SL DRX SHARP Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2105278](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105278.zip) Discussion on SL DRX inactivity timer SHARP Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2105297](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105297.zip) Further discussion on Sidelink DRX LG Electronics France discussion NR\_SL\_enh-Core

[R2-2105351](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105351.zip) SL DRX Configuration Impact on RAN1 and RAN2 vivo discussion

[R2-2105352](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105352.zip) Left issues on SL DRX vivo discussion

[R2-2105385](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105385.zip) Discussion on active time regarding Sidelink DRX ASUSTeK discussion Rel-17 NR\_SL\_enh-Core

[R2-2105400](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105400.zip) Discussion on HARQ RTT and Retransmission Timer for SL DRX Fujitsu discussion Rel-17 NR\_SL\_enh-Core R2-2103287

[R2-2105401](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105401.zip) Alignment of sidelink DRX active time Fujitsu discussion Rel-17 NR\_SL\_enh-Core R2-2103288

[R2-2105458](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105458.zip) Coordination between Uu DRX and SL DRX Lenovo, Motorola Mobility discussion Rel-17 NR\_SL\_enh-Core

[R2-2105480](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105480.zip) Discussion on sidelink DRX configuration Xiaomi communications discussion

[R2-2105484](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105484.zip) DRX alignment between TX and RX UE Xiaomi communications discussion

[R2-2105493](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105493.zip) Remaining aspects of SL DRX Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2105495](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105495.zip) summary offline 706 Ericsson report Rel-17 NR\_SL\_enh-Core R2-2104472

[R2-2105532](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105532.zip) Remaining issues on DRX Timers for SL Spreadtrum Communications discussion Rel-17 NR\_SL\_enh-Core

[R2-2105553](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105553.zip) Consideration on sidelink DRX for broadcast and groupcast Huawei, HiSilicon discussion Rel-17

[R2-2105593](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105593.zip) Discussion on SL communication impact on Uu DRX Huawei, HiSilicon discussion Rel-17 NR\_SL\_enh-Core

[R2-2105707](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105707.zip) Proposals for Sidelink DRX Sony discussion Rel-17 NR\_SL\_enh-Core

[R2-2105733](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105733.zip) Geolocation for Sidelink DRX Nokia, Nokia Shanghai Bell, Fujitsu, Fraunhofer IIS, Fraunhofer HHI discussion Rel-17 NR\_SL\_enh-Core R2-2103468

[R2-2105902](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105902.zip) Discussion on Directional SL DRX for Unicast Qualcomm Finland RFFE Oy discussion

[R2-2105904](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105904.zip) Discussion on SL DRX configuration for Groupcast & Broadcast Qualcomm Finland RFFE Oy discussion

[R2-2105906](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105906.zip) Discussion on SL DRX Timers and Others Qualcomm Finland RFFE Oy discussion

[R2-2105912](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105912.zip) [AT113bis-e][708][V2X/SL] DRX configuration for SL CG and BG ZTE discussion Rel-17 NR\_SL\_enh-Core R2-2104474

[R2-2105958](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105958.zip) Further Issues on Sidelink Traffic Pattern for SL DRX Configuration Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core

[R2-2106056](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106056.zip) On the deciding entity of SL DRX configuration Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_SL\_enh-Core R2-2103305

[R2-2106073](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106073.zip) Coordination between DL DRX and SL DRX Samsung Research America discussion

[R2-2106074](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106074.zip) SL DRX operation for groupcast/broadcast Samsung Research America discussion

[R2-2106172](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106172.zip) SL DRX enabled UE Mode 2 operation ITL discussion Rel-17

[R2-2106202](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106202.zip) Remaining issues in which UE decides sidelink DRX configurations LGE, InterDigital, Huawei, ASUSTeK, Apple discussion Rel-17

[R2-2106204](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106204.zip) Consideration on SL DRX operation LG Electronics Inc. discussion Rel-17

[R2-2106363](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106363.zip) SL DRX Granularity Considerations Convida Wireless discussion Rel-17

[R2-2106364](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106364.zip) SL DRX Configuration: TX Centric or RX Centric Convida Wireless discussion Rel-17

[R2-2106438](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106438.zip) On detailed SL DRX model MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core

[R2-2106439](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106439.zip) On SL DRX timer operation MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core

### 8.15.3 Resource allocation enhancements RAN2 scope

[R2-2104868](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104868.zip) Resource Allocation for eSL InterDigital discussion Rel-17 NR\_SL\_enh-Core

[R2-2105079](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105079.zip) Discussion on inter-UE coordination ZTE Corporation, Sanechips discussion Rel-17 NR\_SL\_enh-Core

[R2-2105133](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105133.zip) Discussion on resource allocation enhacenmens Apple discussion Rel-17 NR\_SL\_enh-Core

[R2-2105353](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105353.zip) Discussion on inter-UE coordination for sidelink mode2 vivo discussion

[R2-2105402](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105402.zip) Dual-mode Configuration and Selection for NR Sidelink Fujitsu discussion Rel-17 NR\_SL\_enh-Core R2-2103289

[R2-2105467](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105467.zip) Power efficient resource allocation and Inter-UE coordination LG Electronics France discussion NR\_SL\_enh-Core

[R2-2105485](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105485.zip) Resource allocation enhancement impact in RAN2 Xiaomi communications discussion

[R2-2105499](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105499.zip) Inter-UE Coordination for Sidelink Mode 2 Resource Allocation Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2105508](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105508.zip) Power Reduction for Sidelink Mode 2 Resource Allocation Fraunhofer IIS, Fraunhofer HHI discussion Rel-17

[R2-2105538](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105538.zip) Discussion on resource allocation enhancement for NR sidelink Spreadtrum Communications discussion Rel-17 NR\_SL\_enh-Core

[R2-2105708](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105708.zip) Discusison on Sidelink sensing Sony discussion Rel-17 NR\_SL\_enh-Core R2-2103617

[R2-2105775](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105775.zip) General principles for resource allocation enhacements for SL mode 2 Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2105824](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105824.zip) Discussion on sidelink resource allocation enhancements Lenovo, Motorola Mobility discussion Rel-17

[R2-2106067](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106067.zip) Resource Allocation Enhancements for Reduced Power Consumption and Enhanced Reliability Intel Corporation discussion Rel-17 NR\_SL\_enh-Core

[R2-2106075](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106075.zip) Resource allocation enhancements Samsung Research America discussion

[R2-2106358](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106358.zip) On Resource Allocation Mode 2 Enhancement for NR Sidelink Convida Wireless discussion Rel-17 R2-2103948

[R2-2106440](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106440.zip) Transmission of assistance information for Mode 2 enhancement MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core R2-2103578

### 8.15.4 Other

[R2-2104753](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104753.zip) Impacts of SL DRX on Other Procedures CATT discussion Rel-17 NR\_SL\_enh-Core

[R2-2105494](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105494.zip) Interaction between partial sensing and DRX Ericsson discussion Rel-17 NR\_SL\_enh-Core

[R2-2106441](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106441.zip) On SL sync search optimization MediaTek Inc. discussion Rel-17 NR\_SL\_enh-Core R2-2103579

## 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.

Work Plan

[R2-2105241](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105241.zip) RAN2 Work Plan for Enhancement for Private Network Support for NG-RAN Nokia, China Telecom (Rapporteurs) Work Plan Rel-17 NG\_RAN\_PRN\_enh-Core

* Noted

Running CR

[R2-2105242](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105242.zip) Draft Stage 2 CR: Non-Public Network enhancements Nokia, Nokia Shanghai Bell draftCR Rel-17 38.300 16.5.0 C NG\_RAN\_PRN\_enh-Core

- Have incporporated agreements for previsou meeting, will add for this meeting.

* Short post email to endorse updated CR

LS in

[R2-2104704](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104704.zip) LS on limited service availability of an SNPN (C1-212601; contact: Nokia) CT1 LS in Rel-17 eNPN To:RAN2 Cc:SA2, SA1

- Need to answer

- Oppo think we shold reply no

* Noted

[R2-2104728](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104728.zip) Reply LS on support of PWS over SNPN (S2-2102963; contact: Qualcomm) SA2 LS in Rel-17 To:SA1, CT1, RAN2, RAN3, SA, CT, RAN, SA3

- No action

* Noted

LS out

[R2-2105243](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105243.zip) Proposed reply for LS on limited service availability of an SNPN (C1-21212601/[R2-2104704](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104704.zip)) Nokia, Nokia Shanghai Bell discussion Rel-17 NG\_RAN\_PRN\_enh-Core

- Intel think lower layers doesn’t do this, but instead NAS does trial and error trying SNPNs one after another.

- Nokia clarifies that the proposal is to have the same behaviour for SNPN access mode as for PLMN.

- intel still think NAS need to do trial and error.

- QC has same undersatanding as Nokia and think 304 may not even need changed.

- intel think it can work if the emergency call support is per Cell not per SNPN. QC think that this can be done.

- LG agrees with QC and Nokia.

- Ericsson think this need further discussion. CATT think that indeed an SNPN need to be selected for the emergency call and this need to be clarified. QC is not sure why we can’t have the exact same behaviour as for PLMN. QC think that if this is indicated per SNPN this cas also work.

- intel think that if we indicate this per SNPN then NAS need to do trial error.

- Oppo think that we should indicate to CT1 that no NAS impact is foreseen.

- QC think that we can indicate to CT1 that we can say YES, and that if this is inficated per Cell then no impact to NAS, and if per SNPN there may be NAS impact. Nokia agrees. Oppo support this way forward. Ericsson are also ok.

- Intel think that if we indicate this, then this is a change of behaviour (per SNPN). LG think that in any case, AS will do the work so there no mandatory impact to NAS.

- Nokia think we just say YES

* We reply “YES”, but need to discuss the details of the additional info and the alternatives.

Reply LS by Email

* [AT114-e][040][eNPN] Reply LS on limited service availability of an SNPN (Nokia)

Scope: Based on the on-line discussion of R2-2105243, compose a final version of reply LS. Continue discussion to the extent needed in order to provide sufficient information about AS behaviour and options, in order for CT1 to be able to discuss and determine the related NAS impacts and behaviour.

Intended outcome: Approved LS out.

Deadline: EOM if possible (can be continued in a short post meeting discussion)

### 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)

* [AT114-e][028][eNPN] SNPN and subscription or credentials by a separate entity (China Telecom)

Scope: Start from the baseline, the tdocs under 8.16.2, identify easy agreements, potential agreements, discussion/open points, and identify questions to ask other group, if any,

Intended outcome: Report that paves the way for on-line agreements.

Deadline: In time for CB online May 25

[R2-2106659](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106659.zip) SNPN and subscription or credentials by a separate entity China Telecom

DISCUSSION

Cat A P1

- Ericsson think it should be the other way around that indication of accessing using CH is set independently of GIN. Nokia agrees. CATT agree with Ericsson. CT think the main message is that the two parameters are independent.

- QC think it is better to just say that GIN is broadcast only if CH is set. Both ericsson and Nokia agrees.

- QC think that if Ch is not broadcast there is no reason to have the GIN.

Cat A P2

- Samsung think that NAs should provide this to AS to provide top the network.

- Nokia think P2 is good as it is, there are no requirements by SA2 to provide this to network. Ericsson agrees with Nokia. LG agrees as well.

Cat A P4

- LG think there might be impact for inter-node signalling. Prefer to restrict to Uu

Cat A P5

- Oppo think we should add the use case.

Cat B P1

- Nokia think the GIN list is not same functionality as otherwise in SIB1, i.e. not needed for cell reselection etc, only network selection. Ericsson agrees. Apple and Huawei agrees. Intel support new SIB.

- CMCC think that network selection has performance requirements and may be needed in SIB1

- Huawei prefer to not have GINs in SIB1, they can be very large.

- ZTE think that if GIN is in separate SIB then the network selection delay would be very large. Should be in SIB1. Think we can have a max number.

- LG think that proper SIB scheduling can take care of latency. Think the list is too large for SIB1.

- Oppo think that we have a principle that network selection is in SIB1.

- QC point out that one GIN will be 80-90 bits and the number of network may be very large.

- CATT agree this should not be put in SIB1.

- China telecom think we don’t need too many GINs as one GIN can represent many SNPN.

- Nokai think the number of GINs can be high, e.g. for airport wifi can be 10s of 3rd part authenticators.

- ZTE think that this need to read for strongest cell of every carrier. Think that the indications can then also be broadcasted by the new SIB. Nokia think that single bit is ok in SIB1. Can accept that the two indications and the GINs can be broadcasted together.

- Mediatek think that this can be left for implementation, i.e. indicate in SIB1 when the nu of GINs is low. Nokia think this would make implementations complex.

- CMCC wonder if the new SIB can be scheduled as SIB, why not include this in SIB1, e.g. for FR2 there is beamsweeping with longer delays. QC replies that the TBS limitation for SI message is ~3000 bits, but this may be smaller for SIB1.

* GIN for access using CH is broadcst only if Indication of accessing using CH is broadcast.
* RAN2 assumes that NAS does not send selected GINs and two indications related to external credentials to AS.
* There is no impact on cell (re)selection to support SNPN with subscription or credentials by a separate entity.
* RAN2 assume there is no RAN2 UE impact of connected mode mobility for separate credential.
* RAN2 assumes the selected SNPN ID is enough for AMF selection for separate credential.
* GIN is broadcasted by new SIB

[R2-2104767](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104767.zip) Support SNPN with subscription or credentials by a separate entity OPPO

[R2-2105125](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105125.zip) Additional considerations for access of SNPN with credentials from a different entity Apple

[R2-2105167](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105167.zip) Consideration on the Separate Entity Supporting ZTE Corporation, Sanechips

[R2-2105192](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105192.zip) Further Consideration on Subscription or Credentials by CH CATT

[R2-2105200](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105200.zip) Consideration on GIN related issues China Telecommunication

[R2-2105244](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105244.zip) Discussion on GINs from RAN2 perspective Nokia, Nokia Shanghai Bell

[R2-2105291](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105291.zip) Remaining issues on supporting SNPN with subscription or credentials by a separate entity vivo

[R2-2105409](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105409.zip) SNPN access with different entity credentials Qualcomm Incorporated

[R2-2105570](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105570.zip) Accessing SNPN with credentials owned by a credentials holder Huawei, HiSilicon

[R2-2105632](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105632.zip) Cell (re)selection for Rel-17 NPN enhancements Asia Pacific Telecom, FGI

[R2-2105670](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105670.zip) RAN2 impact to support SNPN with credentials by a separate entity MediaTek Inc.

[R2-2105915](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105915.zip) Support of credentials owned by third party entities in SNPN Intel Corporation

[R2-2106034](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106034.zip) SNPN access using external credentials Ericsson

[R2-2106199](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106199.zip) On Supporting Visited SNPN with Credentials Samsung

[R2-2106246](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106246.zip) Left Issues on Supporting SNPN with Credentials by a Separate Entity CMCC

[R2-2106296](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106296.zip) Resolving issues for access with external CH LG Electronics

* 16 tdocs above are noted

### 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

* [AT114-e][029][eNPN] UE onboarding and provisioning for NPN (Ericsson)

Scope: Start from the baseline, the tdocs under 8.16.3, identify easy agreements, potential agreements, discussion/open points, and identify questions to ask other group, if any,

Intended outcome: Report that paves the way for on-line agreements. Make agreements by email, as far as possible.

Deadline: EOM

Due to lack of on-line time, decisions as far as possible by email.

ON-LINE CB:

- Ericsson would like to discuss contacting other groups for the following points

- 1: Discuss whether we need separate GIN list for onboarding and separate credentials SA2

- 2: New Access Category SA1 or CT1

DISCUSSION

Point 1

- OPPO think we can have a common list but from r2 perspective no difference, we can ask

- CMCC think these are separate purposes need LS

- LG support LS Apple as well. ZTE as well

- Ericsson wonder if we can add the GIN encoding question. LG support.

* Send an LS to SA2 to ask about separate or joint GIN list for onboarding and separate credentials and GIN encoding.

Short Post meeting email disussion for the LS (Ericsson)

[R2-2104768](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104768.zip) Support UE onboarding and provisioning for NPN OPPO

R2-2105124 Additional considerations for UE on-boarding and provisioning for NPN Apple

R2-2105168 Consideration on the Onboarding and Provisioning for NPN ZTE Corporation, Sanechips

R2-2105193 Further Discussion on UE Onboarding and Provisioning for NPN CATT

R2-2105245 Onboarding related considerations Nokia, Nokia Shanghai Bell

R2-2105292 Remaining issues on supporting UE onboarding and provisioning for NPN vivo

R2-2105410 UE onboarding and provisioning Qualcomm Incorporated

R2-2105554 UE onboarding and remote provisioning for SNPN Huawei, HiSilicon

R2-2105709 Discuss the need of UAC for UE on-boarding Sony

R2-2105916 Support UE Onboarding and provisioning for NPN Intel Corporation

R2-2106035 UE onboarding Ericsson

R2-2106200 On Supporting Onboarding SNPN Samsung

R2-2106228 Discussion the left issues to support UE on-boarding and remote provisioning CMCC

R2-2106297 Resolving issues for UE onboarding and provisioning for NPN LG Electronics

### 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 feMIMO

(NR\_feMIMO-Core; leading WG: RAN1; REL-17; WID: RP-202024)

Time budget: 0.5 TU

Tdoc Limitation: 2 tdocs

Email max expectation: 2 threads

### 8.17.1 Organizational

Rapporteur input, incoming LS etc.

LS in

[R2-2104712](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104712.zip) LS on TCI states indication for PDCCH (R1-2104064; contact: Intel) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN2

- Intel has a contribution. Propose to confirm to introduce the enhanced MAC CE.

* Treat related tdocs by email, attempt to agree to have the enhanced MAC CE.
* Noted
* [AT114-e][035][feMIMO] TCI states indication for PDCCH (Intel)

Scope: Treat R2-2104712 and the related submitted tdocs.

Discuss the topic, attempt to make some basic agreements, e.g. agree to have the requested MAC CE, and potentially identify FFS.

Intended outcome: Report

Deadline: Monday May 24 for on-line CB

AGREEMENTS

* [035] An enhanced MAC CE is introduced for PDCCH activating two TCI states.
* [035] The enhanced MAC CE includes 1) serving cell ID, 2) CORESET ID and 3) Two TCI state IDs.
* [035] The enhanced MAC CE is based on option 1 but the CRs will be discussed after RAN1 send further details.
* [035] no reply LS out is required in this meeting.

[R2-2104719](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104719.zip) LS on Timing Assumption for Inter-Cell DL Measurement (R1-2104142; contact: Samsung) RAN1 LS in Rel-17 NR\_feMIMO-Core To:RAN4 Cc:RAN2

- R2 CC, no action.

- Samsung think R2 can use information herein, e.g. decided to use L1 RSRP for neughbor cell

* Noted

### 8.17.2 Multi-Cell support

Includes multi-TRP and mobility.

Including outcome of email discussion [Post113bis-e][061][feMIMO] InterCell mTRP and L1L2 mobility (Samsung)

[R2-2106314](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106314.zip) Summary of email discussion [Post113bis-e][061][feMIMO] InterCell mTRP and L1/L2 mobility (Samsung) Samsung report NR\_feMIMO-Core

DISCUSSION

- Mediatek think we need to ask R1 some questions, e.g. which configurations of non-serving cells are needed, and e.g. is RACH needed.

- Xiaomi agres with MTK that multiTRP and mobility scenarios are seemingly similar. If we focus on intra-DU it gets simpler.

- vivo think R1 need to discuss he scope is it one or two models? Think also that R2 need to clarify the common configurations.

- Nokia agrees that we should ask some questions. Think that event triggered measurements from R2 can be reused. Ok with Rapporteur proposal.

- ZTE also think we need to ask questions, e.g. if resources in src cell are released after HO.

- Oppo think we should understand the model and understand what issues we need to resolve. Oppo think we can also consider that there is only one cell. With two cells the workload gets too high.

- Apple also think the two models are similar, but think e.g. mTRP assumes overlap of src and TGT cell. Think that if we limit to intra-DU there are no issues with security.

- Intel think that the current proposal is a good starting point, but we need to clarify things. Think e.g. that it is easier if neighbour cell resource is just an assiting resource.

- Huawei think P1 as described here is one possibility, but R1 has not decided this (yet)

- Samsung think this is for common understanding. Agree with Huawei that some contents in P1 is just one possibility, but can generalize when we draft the LS. Samsung agrees with Intel. Think we need to ask R1 whether switching between TRPs can be done.

- Chair wonder if we have same MAC entity for all TRPs. Intel think yes (for intra-DU).

- LG think singelprotocol stack is applicable to both models. Think the second model is unclear in R1. Think we should avoid speculating too much on mobility model. Oppo agrees.

- Ericsson think we have single protocol stack, and scenario is intra-DU. Think the work can start by looking at the common parts.

- QC think multi-TRP and L1L2 mobility are different, think we need to understand L1L2 mobility. Think we don’t need to discuss the MAC CE details now.

- FW think that the mobility scenario should be worked on and defined in RAN2. Think there is lots of overlap, can start with multi-TRP.

- Chair think that we need to understand what would be the objective of HO

P3-P7

- LG has concerns on multiple C-RNTI. Chair wonder if from R2 perspecitve there is an issue, is this a R1 issue. Xiaomi as well think that multiple CRNTI may cause issues with RACH BFR.

- ZTE think P3 need to be rephrased.

- Oppo think P3-P5 there is just a single cell. Chair think the multi-cell is in the WID.

- Nokia think that if cells is a bad word, then we can use resources

- FW and Huawei are ok with current proposals knowing that the difference between cells may be just the PCI ..

P4

- Chair proposes to not agree. Samsung think R1 asked for this. Intel think we can ask R1 is there is any issue.

P1

- Huawei think we canot agree to P1 as there is too much details.

Chairman:

- It seems that with the intra-DU restriction everyone assumes a single MAC entity / single L2 protocol stack that can use L1 transmission resources of > 1 cell, both for multi-TRP-scenario and mobility-scenario, and that the protocol stack doesn’t need to be relocated.

- Such assumption makes it also quite unclear why a mobility / handover fuction is needed, it is needed in order to reconfigure security? In order to change roles of the cells? Do they have differnet capability? (e.g. in terms of which Phy channels are supported).

- Without clarifying the objective of a mobility function it will not be possible to design one.

* RRC provides the configuration for “the cells for L1/L2 centric mobility”, and L1/L2 signaling can be used/feasible for the dynamic usage/switching of the configured value.
* R2 didn’t see a problem with using different C-RNTIs for different cells. Different C-RNTI seems more natural in a mobility scenario. No conclusion in R2 for mTRP scenario.
* RRC configurations of the cells for L1/L2 centric mobility, including C-RNTI, are configured by RRC.
* RAN2 prefer to restrict the scope of the deployment only for intra-DU case in Rel-17.
* RAN2 assumes to prioritize intra-frequency case in Rel-17, but RAN2 follows the RAN4 decision to support inter-frequency case.
* Use P1 and P2 as baseline for further discussion, aiming to reply to the LS. (P1 seems to be too detailed need generalizing).

[R2-2106664](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106664.zip) [AT114-e][036][feMIMO] InterCell mTRP and L1/L2 mobility Samsung

DISCUSSION

- OPPO wonder if this is just one serving cell?

- OPPO suggest to not refer to intercell even though it is clear that resources with differnet PCIs are used, think this wodul be simpler

- LG think P1 and P2 can be agrees as baseline understandings. On P4 think this doesn’t need to be shared with R1. Also hasve the prepared LS to RAN1 would like to focus on the LS.

- QC think we should focus on LS, and think this is only for L1L2 mobiltiy.

- QC think that in scenario 2 we need to add the configuration step should be added, and remove the “having TRP”

- FW think that UE will stay at cell as long as possible and only change cell when needed to avoid ping-pong. Think both scenarios are relevant for L1L2 centric mobility.

- HW think we should focus on the LS and think P1 and P2 are most relevant to LS. For P1 P2 think rapporteur removed some possibilities, e.g. CSI-RS, is this intentional? Or left to R1?

- vivo are ok with P1 and P2 but don’t need to share these Details to R1. Think we shall inform on R2 impact.

- Ericsson agrees with QC that P1 is about mTRP and not that applicable, and agree with QC that in P2 we need to remove TRP. On P4 this is mainly for R2, and R2 should only dicuss on intercell mobility.

- ZTE are ok with P1 but think for P2 we must discuss whether the resrouces of the Soruce cell will be removed in the handover, this could also be CA.

- intel understand that R1 LS discussed TCI state update and asks whether there is a need to change serving cell. Intel think that as long as UE is in coverage of serving cell there is no need to change. Think that UE should be in coverage of serving cell always, also for multi-TRP case, to receive common channels etc, and this can be shared by R1. LG agrees. Samsung agree as well.

- MTK prefer to have both scenarios in the LS reply. Xiaomi agrees, and think R2 can clarify that both src and TGT cell configurations can be kept and UE could switch.

- Apple prefer to indicate mobility aspects for both, think that there is a restriction to not transmit on non-serving cells for both scenarios.

- Nokia think the original LS is indeed about both scenarios and a lot of companies think there is significant similarity. Should prepare to support both. No harm in informing R1 about both.

P1.4

- Apple think this is dedicated channel per TRP. Think also RLM will be affected.

P2.2

- Lenovo think this can be both L1 measurments and L3 measurments. Chair proposes to keep this vague. Think that gNB can use whatever measurement hs likes for mobility, but hope that RAN2 doesn’t need to consider tailored L3 measurements for this.

P1P2

- FW wonder for 2.4 and 1.3 the L1L2 singaling is different.

P5

- 5.1: Chair suggest to not ask this. Vivo would like to ask whether both models need to be specified in R17.

- 5.2: Intel rasied this question but no need to ask

- 5.4: LG would like to ask this as too frequent HO may negate the gain. 5.5: LG think especialy TA is important to ask about.

- ZTE think R1 cannot reply. Think we can ask how to avoid frequent HO.

- ZTE would like to know whether the resource in SRC cell is released after HO/serving cell switch, UE dedicated resources etc.

- MTK think we can avoid the TA issue. Think we can ask along he lines of ZTE comment.

- ASUS think that both models are in he scope, but if we would ask we should ask about the related R2 scope.

- Huawei think we should just askl R1 to clarify when LSes are sent which objective is related. Think we don’t need to ask any of these questions.

- Intel think that how frequently HO is expected is important. Chair has sympathy for asking this. QC think that this doesn’t need ot be ased .

- QC think we can ask to confirm that L1L2 mobility is based on L1 measurements. LG xiaomi vivo are ok with this. FW think enhancements in R1 are not precluded

- Intel think we need to discuss wheher L1 meas are sufficient.

Reply LS

- OPPO think if we include the agreements the it is important to include both for scenarios 1 and 2 the case that the feMIMO operation is done for SCells.

- CATT think that we have not already agreed to do all aspects of scenario 2 and the replies are conditional to whether we do this or not. Cannot handle all scenarios in given TU.

- Ericsson think that HO-like is sufficient and it can include SCells as well.

- FW think that we can calrify that the agreements are for Pcell change.

- QC agrees that both Pcell and Scell is included and Pcell is the more complex case.

- LG think that Scell mobility doesn’t need to be included as we can use SCell activation deactivation. Samsung agrees with LG and think SCell mobility is not included in the scope of this WI. Think the reduction of interruption time is only for Pcell mobility. ZTE agrees, FW agrees as well. Huawei agrees. Nokia agrees. Intel think that same frequency is the main scope. Can make focus the PCell. Xiaomi think we can ask R1, as the WID is not very clear.

* RAN2 confirm the simplified procedures on the inter-cell multi-TRP-like model as a baseline RAN2 understanding:

Scenario 1: Inter-cell multi-TRP-like model

1. UE receives from serving cell, configuration of SSBs of the TRP with different PCI for beam measurement, and configurations needed to use radio resources for data transmission/reception incl resources for differet PCI.

2. UE performs beam measurement for the TRP with different PCI and report it to serving cell.

3. Based on the above reports, TCI state(s) associated to the TRP with different PCI is activated from the serving cell (by L1/L2 signaling).

4. UE receives and transmits using UE-dedicated channel on TRP with different PCI.

5. UE should be in coverage of a serving cell always, also for multi-TRP case, e.g. UE should use common channels BCCH PCH etc. from the serving cell (as in legacy).

* RAN2 confirm the simplified procedures on the L1L2 mobility model as a baseline RAN2 understanding:

Scenario 2: L1L2 mobility model (i.e. with serving cell change)

1. UE receives from serving cell, configuration of SSBs of the cell with different PCI for beam measurement/ serving cell change.

2. UE performs beam measurement for the cell with different PCI and report it to serving cell.

3. Serving cell configuration for cell with other PCI is provided to the UE by RRC (pre-configuration for serving cell change, FFS if this step is same as 1).

4. Based on the above reports, TCI states for cell with different PCI is activated along with the serving cell change (by L1/L2 signaling). FFS if this is multiple steps.

5. UE changes the serving cell and starts receiving/transmitting using the pre-configured UE-dedicated channel and TCI states.

* Ask R1 to confirm that L1L2 mobility is assumed to be based on L1 measurements (not in R2 scope)
* R2 assumes for now that L1L2 mobility model includes Pcell mobility and possibly also Scell mobility (FFS).
* R2 assumes that for both multi-TRP and mobility scenarios, single protocol stack can be assumed (intra-DU)
* [AT114-e][036][feMIMO] InterCell mTRP and L1/L2 mobility (Samsung)

Scope: Agree on Reply LS to RAN1. Can include all R2 agreements and explicitly formulated replies to R1 questions (to the extent needed/possible)

Intended outcome: Approved LS out

Deadline: EOM (can CB May 27 if needed)

[R2-2106768](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106768.zip) [DRAFT] LS Reply on TCI State Update for L1/L2-Centric Inter-Cell Mobility Samsung LS out

- Oppo think we can cc RAN but with no action.

- Nokia would like to to agree this version. Intel are ok to approve

- Ericsson think we haven’t discussed how much work this is. Prefer to remove RAN

- Xiaomi think that for answer to R1 1-3.

- Chair wonder if we could be vauge just say RAN2 assumes there are several possible ways how to handle configurations and state at mobility.

- HW would support this. Think anyway post email is needed for wording checking (only editorial).

- Intel think we should keep the text can consider to add “if needed” instead.

- Chair: it seems that the LS is agreeable.

* Add “if needed” in the reply to 1-3
* Can CC RAN (with no action)
* Short email checking (for editorials)

[R2-2104908](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104908.zip) Discussion on L1 L2-Centric Inter-Cell Mobility vivo discussion Rel-17 NR\_feMIMO-Core R2-2102855

[R2-2104988](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104988.zip) Multi-cell support for multi-TRPand L1 mobility Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_feMIMO-Core

[R2-2105026](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105026.zip) Further aspects on L1/L2-Centric Inter-Cell Mobility Intel Corporation discussion Rel-17 NR\_feMIMO

[R2-2105027](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105027.zip) Enhanced MAC CE for PDCCH in multi-TRP deployment Intel Corporation discussion Rel-17 NR\_feMIMO

[R2-2105033](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105033.zip) Discussion on L1/2 centric mobility OPPO discussion Rel-17 NR\_feMIMO-Core

[R2-2105103](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105103.zip) L1/L2-centric inter-cell mobility Apple discussion Rel-17 NR\_feMIMO-Core

[R2-2105294](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105294.zip) Procedures of L1L2-Centric Inter-Cell Mobility MediaTek Inc. discussion

[R2-2105341](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105341.zip) Discussion on RAN2 specification impacts of TRP-specific BFR OPPO discussion Rel-17 NR\_feMIMO

[R2-2105354](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105354.zip) L1/L2 Mobility Overview Qualcomm Incorporated discussion

[R2-2105621](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105621.zip) On Scenarios for L1 L2 mobility for FeMIMO CATT discussion Rel-17 NR\_feMIMO-Core

[R2-2105622](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105622.zip) Discussions on L1 L2 mobility for FeMIMO without serving cell change CATT discussion Rel-17 NR\_feMIMO-Core

[R2-2105826](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105826.zip) Discussion on the support of inter-cell multi-TRP operation Lenovo, Motorola Mobility discussion Rel-17

[R2-2105827](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105827.zip) Discussion on the support of L1/L2 centric inter-cell mobility Lenovo, Motorola Mobility discussion Rel-17

[R2-2105857](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105857.zip) Consideration on the L1L2 centric mobility ZTE, Sanechips discussion Rel-17 NR\_feMIMO-Core

[R2-2105870](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105870.zip) Beam failure with mTRP Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_feMIMO-Core

[R2-2105991](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105991.zip) L1/L2 centric-mobility: Multi-TRP Huawei, HiSilicon discussion Rel-17 NR\_feMIMO-Core

[R2-2105992](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105992.zip) Handover-like mechanism for L1/L2-centric inter-cell mobility Huawei, HiSilicon discussion Rel-17 NR\_feMIMO-Core

[R2-2105999](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105999.zip) On L1/L2 centric inter-cell mobility Ericsson discussion

[R2-2106295](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106295.zip) Potential RAN2 work for feMIMO LG Electronics discussion Rel-17

[R2-2105731](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105731.zip) Enhanced TCI State Indication for UE-specific PDCCH MAC CE Xiaomi Communications discussion Rel-17 NR\_feMIMO-Core

LS out

[R2-2106315](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106315.zip) DRAFT LS Reply on TCI State Update for L1/L2-Centric Inter-Cell Mobility Samsung LS out NR\_feMIMO-Core To:RAN1 Cc:RAN3, RAN4

[R2-2105355](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105355.zip) Responses to RAN1 LS for L1/L2 Mobility Qualcomm Incorporated discussion

[R2-2105907](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105907.zip) On the LS about Activating two TCI states with a MAC CE Ericsson discussion NR\_feMIMO-Core

[R2-2105858](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105858.zip) Consideration on the enhanced TCI state indication MAC CE for PDCCH ZTE, Sanechips discussion Rel-17 NR\_feMIMO-Core

Withdrawn

R2-2105617 On Scenarios for L1 L2 mobility ?for FeMIMO CATT discussion Rel-17 NR\_feMIMO-Core Withdrawn

R2-2105618 Discussions on L1 L2 mobility for FeMIMO without serving cell change CATT discussion Rel-17 NR\_feMIMO-Core Withdrawn

R2-2105619 On Scenarios for L1 L2 mobility ?for FeMIMO CATT discussion Rel-17 NR\_feMIMO-Core Withdrawn

R2-2105620 Discussions on L1 L2 mobility for FeMIMO without serving cell change CATT discussion Rel-17 NR\_feMIMO-Core Withdrawn

## 8.18 NR R17 Other

Time budget: 1.5 TU (also the R1 misc items are treated under this AI)

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.

In general incoming LSes may/will be treated.

LS IN - Misc

[R2-2104715](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104715.zip) LS response on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services) (R1-2104117; contact: Qualcomm) RAN1 LS in Rel-17 FS\_5GXR, FS\_XRTraffic, 5G\_AIS To:RAN2

R2 CC’ed No Action, [000] Propose Noted

[R2-2104732](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104732.zip) Reply LS to SA2 on UE Data Collection (S4-210644; contact: Qualcomm) SA4 LS in Rel-17 eNA\_Ph2 To:SA2 Cc:RAN2, SA3

R2 CC’ed No Action, [000] Propose Noted

[R2-2104735](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104735.zip) LS on network sharing with multiple SSBs in a carrier (S5-212403; contact: ZTE) SA5 LS in Rel-17 MANS To:RAN2, RAN3

Replied last meeting, not needed can be withdrawn.

* [AT114-e][030][NR17] RACH for HO with PSCell (Ericsson)

Scope: Treat R2-2104726, R2-2105777, R2-2105778, R2-2105779, R2-2105776, R2-2104989, R2-2104990, R2-2105093, R2-2105155, R2-2106166

Phase 1, determine agreeable parts, Phase 2, for agreeable parts Work on CRs, and LS out if applicable.

Intended outcome: Report, Agreed CRs, approved LS

Deadline: Schedule A

R2-2106673 Summary of [AT114-e][030][NR17] RACH for HO with PSCell Ericsson

* [030] Noted, agreements reflected below

RACH in HO with PSCell (R4)

Treat by Email

[R2-2104726](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104726.zip) LS on RACH procedure for HO with PSCell (R4-2105830; contact: Ericsson) RAN4 LS in Rel-17 NR\_RRM\_enh2-Core To:RAN2 Cc:RAN3

* [030] Noted

[R2-2105777](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105777.zip) RACH procedure for HO with PSCell Ericsson discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2104989](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104989.zip) RACH procedure for HO with PSCell Nokia, Nokia Shanghai Bell discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2105093](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105093.zip) Clarification on RACH Procedure for HO with PSCell Apple discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2105155](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105155.zip) Discussion on RACH procedure for HO with PSCell ZTE Corporation, Sanechips discussion Rel-17 NR\_RRM\_enh2-Core

[R2-2106166](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106166.zip) Discussion on RAN4 LS on RACH procedure for HO with PSCell Huawei, HiSilicon discussion Rel-17 NR\_RRM\_enh2

* [030] 5 tdocs noted
* [030] RAN2 confirms that there is no restriction on the order on which the UE shall perform RACH towards the PCell and PSCell.
* [030] For HO with MR-DC configuration, in case RACH is required on the PCell and PSCell, the UE is not required to initiate the RACH towards PCell and PSCell at the same time.

[R2-2105778](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105778.zip) Clarification on RACH procedure for HO with PSCell Ericsson CR Rel-15 37.340 15.12.0 0265 - F NR\_RRM\_enh2-Core, NR\_newRAT-Core

[R2-2105779](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105779.zip) Clarification on RACH procedure for HO with PSCell Ericsson CR Rel-16 37.340 16.5.0 0266 - F NR\_RRM\_enh2-Core, NR\_newRAT-Core

* [030] revised

R2-2106675 Clarification on RACH procedure for HO with PSCell Ericsson CR Rel-15 37.340 15.12.0 0265 1 F NR\_RRM\_enh2-Core, NR\_newRAT-Core

[R2-2106676](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106676.zip) Clarification on RACH procedure for HO with PSCell Ericsson CR Rel-16 37.340 16.5.0 0266 1 A NR\_RRM\_enh2-Core, NR\_newRAT-Core

* [030] Endorsed

[R2-2106674](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106674.zip) Reply LS on RACH procedure for HO with PSCell RAN2 LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4 Cc:RAN3

* [030] Approved

[R2-2105776](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105776.zip) [Draft] Reply LS on RACH procedure for HO with PSCell Ericsson LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4 Cc:RAN3

[R2-2104990](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104990.zip) Reply LS on RACH procedure for HO with PSCell Nokia, Nokia Shanghai Bell LS out Rel-17 NR\_RRM\_enh2-Core To:RAN4 Cc:RAN3

* [AT114-e][031][NR17] UL TX Switching (Huawei)

Scope: Treat R2-2104718, R2-2104721, R2-2105156, R2-2105157, R2-2106163, R2-2106164, R2-2106165, R2-2105982, R2-2105623, R2-2105626, R2-2105627,

Start RAN2 discussion, find agreeable points (if any), and and material for an LS out if applicable.

Intended outcome: Report with agreeable points (if any), agreeable LS out if applicable.

Deadline: CLOSED

Rel-17 UL TX switching (R4)

Email first, CB on-line Week2, ambition to make some agreements on how to capture UE cap if possible, and possibly to send an LS. CRs expected at a later meeting.

[R2-2106656](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106656.zip) Summary of [AT114-e][031][NR17] UL TX Switching Huawei

DISCUSSION

P1

- vivo wonder if it means that both R16 and R17 uses the same BC list, can need different entries (diff combinations per band parir).

- Huawei think that for R17 new signalling can be added to cover per bandpair (listed as open issue).

- ZTE are ok.

Gen

- Apple think an LS could help, but we don’t need to hurry.

- ZTE think that at least the second issue was not captured in LSin so we should send LS.

- Oppo don’t think we need a LS.

- Ericsson also think there is no urgency, so we might not need either email disc or LS. No need to agree to Open issues.

Open Issues [AT114-e][031] identified the following (no attempt to formally agree):

- For UE capability reporting including per band-pair per-BC capabilities (i.e. the length of UL switching period and DL interruption applicability) reported for SUL or inter-band UL CA, and per BC capability of UL switching option (i.e. switchedUL, dualUL) reported for inter-band UL CA,

- If R17 signalling for 2Tx-2Tx switching is needed. If so, whether the value indicated by a UE can be different from the one indicated for 1Tx-2Tx switching. In addition, for switching option in case a UE indicates support of R17 switching, if the UE also shall indicate the support of the same option for R16 switching.

- Under 1Tx-2Tx switching or 2Tx-2Tx switching, if separate signalling for the cases with 2CCs@Band B and 1CC@Band B is needed. If so, whether the values indicated by a UE can be different.

- If the fallback capability from 2CCs to 1CCs on band B is supported.

For RRC configuration:

- If the R17 signalling needs to be introduced to configure R17 UL Tx switching (i.e. for 2Tx-2Tx switching, or for the case with 2CCs@Band B).

* For Rel-17 UL Tx switching enhancements, RAN2 to use the UE capability reporting signalling framework of R16 1Tx-2Tx UL Tx switching as baseline and assume the R17 UE capability should be reported in the UL Tx switching specific BC list introduced in R16 (i.e. *BandCombinationList-UplinkTxSwitch*) unless issue is found later.
* Postpone to next meeting (expect to make better progress next meeting based on Further R1 R4 progress).

[R2-2104718](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104718.zip) Reply LS on Rel-17 uplink Tx switching (R1-2104137; contact: China Telecom) RAN1 LS in Rel-17 NR\_RF\_FR1\_enh To:RAN4 Cc:RAN2

[R2-2104721](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104721.zip) LS on Rel-17 Tx switching enhancements (R4-2103234; contact: China Telecom) RAN4 LS in Rel-17 NR\_RF\_FR1\_enh To:RAN1, RAN2

[R2-2105156](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105156.zip) Consideration on Rel-17 UL Tx switching capability ZTE Corporation, Sanechips discussion Rel-17 NR\_RF\_FR1\_enh

[R2-2105157](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105157.zip) Draft LS on Rel-17 UL Tx switching capability ZTE Corporation, Sanechips LS out Rel-17 NR\_RF\_FR1\_enh To:RAN4 Cc:RAN1

[R2-2106163](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106163.zip) RAN2 impact to support R17 UL Tx switching enhancement Huawei, HiSilicon, China Telecom, CATT discussion Rel-17 NR\_RF\_FR1\_enh

[R2-2106164](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106164.zip) Draft CR to TS38.331 to support Tx switching enhancements Huawei, HiSilicon, China Telecom, CATT draftCR Rel-17 38.331 16.4.1 NR\_RF\_FR1\_enh

[R2-2106165](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106165.zip) Draft CR to TS38.306 to support Tx switching enhancements Huawei, HiSilicon, China Telecom, CATT draftCR Rel-17 38.306 16.4.0 NR\_RF\_FR1\_enh

[R2-2105982](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105982.zip) UE capabilities for UL Tx switching enhancement Ericsson discussion

[R2-2105623](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105623.zip) Rel-17 Tx switching enhancements vivo discussion Rel-17 NR\_RF\_FR1\_enh

Moved from 8.17

[R2-2105626](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105626.zip) 38.331 CR on Rel-17 Tx switching enhancements vivo CR Rel-17 38.331 16.4.1 2634 - B NR\_RF\_FR1\_enh

[R2-2105627](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105627.zip) 38.306 CR on Rel-17 Tx switching enhancements vivo CR Rel-17 38.306 16.4.0 0587 - B NR\_RF\_FR1\_enh

Ext 52-71GHz (R4)

Treat online (if time, not urgent)

[R2-2106081](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106081.zip) RAN2 Datapath impact from >52GHz Apple Inc discussion NR\_ext\_to\_71GHz

=> Revised in [R2-2106446](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106446.zip)

[R2-2106446](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106446.zip) RAN2 Datapath impact from >52GHz Apple Inc discussion NR\_ext\_to\_71GHz

R17 Cross WI - RACH (R2)

Treat online

[R2-2104933](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104933.zip) RACH partitioning for Rel-17 features Ericsson discussion Rel-17

* Noted

[R2-2106452](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106452.zip) SDT RACH resource configuration and coordination with other WIs (REDCAP, Coverage-ext, RAN-Slicing) ZTE Corporation, Sanechips discussion

* Noted

DISCUSSION on the two tdocs above

- Ericsson proposes an email discussion towards next meeting.

- Chair think this will be a separate AI next meeting

- Lenovo wonders what is the baseline requirements? Configured in same *BWP*? Will this not have impact to R1? E.g. *search-space* discussions?

- LG think we don’t have many RACH resources. Think that configuration solution is not a good enough solution. Think we also need to discuss the increase of RACH resources, and this should be considered. Porposals by ZTE and Ericsson are temporary.

- Intel think it has already been clairifed that we first discuss WI-specific aspects this meeting, e.g. Radcap mainly discussed in R1, and R1 discussed to use different initial BWP. Intel are not sure we need a common framework for now, think there are WI-specific aspects that need to be resolved first.

- Huawei has similar view as Intel. Think we need more WI specific discussion first. Shold reuse as much as possible, don’t need a coordinated discussion right now.

- Vivo agrees with Intel and Huawei. Vivo also think we should have baseline guideline etc to not consume too much resource.

- Oppo think that Redcap might not need to be considered here. For SDT and slicing can consider but think we need WI decision first.

- Futurewei think coordination is good, and think the goal should be to have a common and consistent configuration. Think we need to first iron out what each WI need. Agree with LG in the long run but thnk R17 can focus on signalling.

- Nokia think we need to avoid L1 changes, cannot have more preambles. Need a clear time-plan for this, think it si good that WI designs first and need a deadline for this.

- xiaomi think that collissions shold be avoided. E.g. SDT and redcap can maybe not used the same design with current assumption

- QC agree with Intel and Huawei.

- ZTE wanted to highlight that some WI are already making decisions, and how can decisions be coordinated. Wanted to start earlier.

- Apple think we should discuss in each WI first. Think also we could have some guidance for each WI.

- Ericsson think we already now see some divergence.

Chair: will have one AI at next meeting.

Chair: many companies seems to not be prepared, so no email discussion to next meeting.

RAN2 TEI17

Postponed to Q3

[R2-2105652](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105652.zip) PWS segmentation area Ericsson discussion Rel-17 TEI17

[R2-2105961](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105961.zip) NR positioning support for TA-based positioning in E-CID Ericsson discussion

Chair comment: One WG decides whether to attempt to have a TEI feature or not. For this case assume this is not RAN2.

# 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

[R2-2104706](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104706.zip) LS on Agreements Related to Support of a maximum DL TBS of 1736 bits as a Rel-17 optional UE capability (R1-2103942; contact: Sony) RAN1 LS in Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core To:RAN2

[R2-2104725](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104725.zip) Reply LS on neighbour cell measurement in NB-IoT RRC\_CONNECTED state (R4-2105800; contact: Huawei) RAN4 LS in Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core To:RAN2

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

Including outcome of [Post113bis-e][351][NBIOT/eMTC R17] NB-IoT RLF measurements (Huawei)

[R2-2105224](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105224.zip) Analysis on connected mode signalling procedure changes for Re-establishment time reduction Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2105314](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105314.zip) Remaining issues for measurement in connected mode ZTE Corporation, Sanechips discussion NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105543](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105543.zip) Discussion on the remaining issue of reestablishment-time-reduction Spreadtrum Communications discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105657](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105657.zip) Triggering RLF cell selection before T3010 expiry Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105661](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105661.zip) Report of email discussion [351] NB-IoT RLF measurements (Huawei) Huawei report Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core Late

[R2-2105828](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105828.zip) Neighbor cell measurements triggering before RLF Lenovo, Motorola Mobility discussion Rel-17

[R2-2105918](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105918.zip) Consideration on neighbour cell measurement in RRC connected state Qualcomm Incorporated discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2106080](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106080.zip) Discussion on connected mode measurement in NB-IoT Ericsson discussion Rel-17

[R2-2106289](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106289.zip) Measurement before radio link failure MediaTek Inc. discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

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

Focus on the following points for each of the solution options:

How does NW configure/enable (dedicated, broadcast signalling?)

How does UE select carrier, based on what criteria and metrics?

What happens upon cell change?

What happens upon coverage change?

Details of the fallback carrier(s).

[R2-2105225](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105225.zip) Further analysis on paging carrier selection options Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2105317](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105317.zip) Further discussion on CEL-based paging carrier selection ZTE Corporation, Sanechips discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core R2-2103321

[R2-2105544](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105544.zip) Further discussion on enhanced paging carrier selection and NPRACH carrier selection Spreadtrum Communications discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105642](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105642.zip) Simplified Static solution THALES discussion

[R2-2105658](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105658.zip) Clarification on Paging carrier selection Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105659](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105659.zip) Guildelines for the design of coverage based paging carrier selection Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105919](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105919.zip) Considerations on the two paging carrier selection schemes Qualcomm Incorporated discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2106076](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106076.zip) Analysis of Rmax based solution and carrier-based solution Ericsson discussion Rel-17

[R2-2106198](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106198.zip) Carrier selection enhancement MediaTek Inc. discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2106380](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106380.zip) Network configuration for paging carrier selection Nokia Solutions & Networks (I) discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6

### 9.1.4 Other

Includes WI objectives led by other WGs.

[R2-2105318](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105318.zip) Further discussion on 16QAM for NB-IoT ZTE Corporation, Sanechips discussion NB\_IOTenh4\_LTE\_eMTC6-Core R2-2103321

[R2-2105363](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105363.zip) Further discussion on 14 HARQ and DL TBS of 1736bits for eMTC ZTE Corporation, Sanechips discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2105660](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105660.zip) Support of DL TBS of 1736 bits for HD-FDD Cat. M1 Ues Huawei, HiSilicon discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

[R2-2106078](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106078.zip) Support of 16-QAM for unicast in UL and DL in NB-IoT Ericsson discussion Rel-17

[R2-2106158](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106158.zip) Total L2 Buffer Size for NB-IoT and LTE-M UEs Ericsson discussion Rel-17 NB\_IOTenh4\_LTE\_eMTC6-Core

## 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: 3 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. Input to SI TR recommendations.

Technical Report

* [AT114-e][033][IoT NTN] TR update (Eutelsat)

Scope: Review TR and update accordingly, Capture agrements from current meeting, Capture RAN2 Recommendations

Intended outcome: Endorsed TP

Deadline: CB Thursday

[R2-2106745](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106745.zip) TP for TR 36.763 capturing RAN2 #114e agreements Eutelsat, MediaTek

- Huawei think we need to redo the recommendation section, it should match the “essential” features rather than listing the whole TR contents.

- Chair agrees. The actions suggested from RP included identifying essential enhancements, which would be target for a small limited WI, i.e. same purpose as a SI TR recommendations section, so could be good that recommendations focus on essentials.

- Huawei think paging capacity formula is difficult to understand and think we cannot have company names in the Annex.

- MTK think that some update is anyway needed to cover the new agreements

* Short email review (TBD how short) of R2 TP, need to update with new agreement and address comments.

Essential Functionality

[R2-2106677](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106677.zip) [AT114-e][032][IoT NTN] TR Essential Features Chairman (MediaTek)

DISCUSSION

P1

- QC think this disable enable is very very simple. Can be configured per UE.

- Huawei think for eNB this is not applicable. For NB-ioT dynamic. Don’t agree with QC as for NB-IoT we cannot reconfigure the UE.

- HugesEcostar wonder how much time this would take. This was also proposed in R1. Inmarsat has same concerns. If very small ok.

- IDt think this was two lines in MAC for NR.

- Chair think this culd be done if no R1 impact.

- Chair think that this could be considerd with lower priority assuming that the ony siolution considerd is the most simple one (it it not essential).

- Ericsson also think this just reduces overhead. Ericsson think this is not so simple. MTK agrees in NR NTN 4 meetings was spent to discuss this.

- QC think that there is a HARQ stall issue that will be addressed by this. Huawei don't see the issue, think this is a corner case.

- Vodafone would like to have the freedom to enable/disable the HARQ. It must be there. Chair wonder what is the expected benefit. VDF indicates that for Geo it shall be possible to transmit without wanting for HARQ.

- Chair think that QC and VDF want the benefit that UE should be ready to accept scheduling at other occasion than today, which is a R1 point.

- QC want to capture that HARQ stall is the problem and disable HARQ feedback is the solution. Huawei think not, and think there is no actual problem.

- Echostar think this can be captured in the TR.

- Chair: there seems to be no consensus to capture that HARQ stall is the problem and disable HARQ feedback is the solution.

* Disabling of HARQ feedback is not essential

For the other conclusions, continue by email, and CB Thursday.

* [AT114-e][032][IoT NTN] TR recommendations essential parts (Chairman)

Scope: Progress the RAN2 part of recommendations and essential parts.

Intended outcome: Agreemens, CB points (Report)

Deadline: Start Monday 24th, one pass initial comments 24h, then interactive without deadline.

R2-2106767 [AT114-e][032][IoT NTN] TR Essential Features Chairman (MediaTek)

Revision of R2-2106677

* [032] Noted, taken into account as below.

[032] DISCUSSION

- [032] Rap: Both QC and ZTE had various comments but were willing to compromise.

- [032] Rap: in the email discussion on particular request it was decided that the following is skipped: *Proposed Conclusion 14****:*** *RAN2 assumes that cell beam is not applicable to NB-IoT or eMTC*, This is assumed to be a R1 topic for decision, and R2 doesn’t need to capture any conclusions about it.

Agreements [032]

* [032] 2: No need has been identified in RAN2 for further R17 IoT NTN enhancement regarding eMTC and NB-IoT Coverage Enhancement features. They are assumed applicable to IoT NTN. L1 issues if any, and the potential related need for further enhancement, are assumed addressed by RAN1.
* [032] 3: Enhancement to PDCP discard timer is not essential, but can be considered in the WI as TS impact is very small.
* [032] 4: No additional agreements on “earth-moving cell” are needed in The SI for Tracking Area Handling, as this is included in the already made agreements.
* [032] 5: Referring to a previous agreement: “The NR-NTN agreements, where the network may broadcast more than one TACs per PLMN in a cell is considered for IoT NTN (other options not excluded for now)”, Remove the text “*(other options not excluded for now)”* from previous agreement.
* [032] 6: Referring to a previous agreement, “[035] 15: RAN2 should wait until agreements regarding TAU are made in the NR-NTN WI, and use those for eMTC/NB-IoT over NTN, if applicable. “. TAU details based on agreements regarding TAU made in the NR-NTN WI is handled in the IoT NTN WI as a part of using the earth-fixed TA concept.
* [032] 13: Enhancements for SON and channel quality reporting for NTN have not been found to be essential
* [032] 8: Support of legacy (R16) cell selection/reselection mechanisms without major enhancements is considered essential. Minor adjustments to existing mobility mechanisms, such as a new parameter values, change to timing etc. can be considered to adapt functionality to NTN.
* [032] 9:  From RAN2 point of view, the existing power saving mechanisms e.g. DRX, PSM, eDRX, relaxed monitoring, and WUS can be reused without enhancement. Can consider enhancements if found needed, to support discontinuous coverage.
* [032] 10: Support of discontinuous coverage without excessive UE power consumption and without excessive failures / recovery actions, is essential, Expectation that this need to be taken into account at least for Idle mode, and that this is applicable for all reference scenarios (GEO, MEO and LEO).
* [032] 12: Enhancements for power saving in connected mode power are not essential. Minor adaptations to enable support in NTN deployment of existing features e.g. EDT, PUR for GEO may be considered in WI phase. (no major changes for adaptation is assumed).
* [032] 15: Support for EPC is essential. RAN2 believes that support for 5GC is not essential, however the impact in RAN2 to additionally support 5GC is small and is feasible.
* [032] 16: The SI can be closed from RAN2 perspective.

[032] Open Point for On-line CB:

- [032] QC proposes to add explicitly to point 11 (on connected mode mobility): *For eMTC, Rel-16 LTE CHO procedure can be considered without major enhancements.*

- [032] Rap: My understanding is that this proposal is feasible, Understand that the impact to Core specifications in R1, R2, R3 and R4 is Zero or almost zero, but there will be some work to settle performance requirements and tests in R4 in a second phase. Note that new CHO triggering condition should be considered to be a major enhancement, and then not in essential scope, because if R2 need to discuss also that, then maybe not feasible as it would be too time consuming.

DISCUSSION ON-LINE

- Ericsson want to clarify what *without major enhancements* is.

- Chair think this is related to time/effort, and think it prevents having new CHO triggers as general part of WI objective. If IoT NTN shall consider a new mobility trigger then need to port something relatively stable from NR NTN.

- QC think we should just consider what we have in LTE TS right now. E.g. adding time-based maybe low effort.

- Huawei also thikn this means that we just consider the CHO as specified for LTE now.

- Apple think we should consider more enhancements from NR NTN, e.g. that it is anyway minor from effort point.

- Oppo also think “minor adjustments” is unclear. Chair think this is an explicitlyt requested wording in some parts to cover e.g. if it is found to not work. Oppo wonder if we can remove “minor adjustment”.

- Huwei think it is ok that what is essential is different to TR contents.

- Very Last: Chair asks the room whether there are objections to point [032] 16 above. No objections.

Update

* 11: Support of legacy (R16) Handover and RLF/reestablishment mechanisms without major enhancements is considered essential. For eMTC, Rel-16 LTE CHO procedure can be considered without major enhancements. Minor adjustments to existing mobility mechanisms, such as a new parameter values, change to timing etc. can be considered to adapt functionality to NTN.

[R2-2106468](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106468.zip) [Pre114-e][004][IoT NTN] Summary of 9.2.1 Essential Parts Huawei

[R2-2104817](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104817.zip) Discussion on essential features of IoT over NTN OPPO discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2104855](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104855.zip) Further Consideration on PSM for IoT NTN CATT discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105364](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105364.zip) Further discussion on essential parts of IoT NTN ZTE Corporation discussion FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105415](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105415.zip) Further discussion on essential parts for IoT-NTN functionality for Rel-17 Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105428](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105428.zip) Essential features for SI TR Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105664](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105664.zip) Discussion on essential parts for IOT NTN Huawei, HiSilicon discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2106168](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106168.zip) Essential functionality in IoT NTN Ericsson discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2106359](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106359.zip) Essential Functionality related to power saving & mobility Beijing Xiaomi Mobile Software discussion Rel-17

* 9 tdocs above Noted

### 9.2.2 Open issues not covered by NR NTN

Address Open issues and essential enhancements specific to IoT, specific to EUTRA, eMTC, NB-IoT, EPS.

[R2-2106479](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106479.zip) Summary 9.2.2 Open Issues not Covered by NR-NTN MediaTek Inc.

DISCUSSION

O1

- LG wonder if L1 periodicity is the same for NTN as for terrestrial. MTK think this is not flexible for eMTC and NB-IoT

- QC would not like to have any agreement at all.

P2

- Chair wonder if R2 really need to disucss this. Delay tolerant and intermittent is a prioritzaed case per RP discussion. Already clear. QC and Ericsson agrees.

- Huawei thkink also HARQ disable can be handled acc top P1. Ericsson think HARQ is evaluated by R1, think we should wait.

- OPPO think HARQ disable is R2 scope, wonder if we need to address.

- Inmarsat also think HARQ disable is not very important, HARQ can sometimes be useful.

- on HARQ diable, IDT think the decision can follow NR NTN if decision is made to have it.

- QC think it is clear that for GEO HARQ feedback is useless. QC think we must capture a decision in the TR. Ericssson think that QC is referring to a paper addressing the deepest coverage, and think the deep coverage is a reasonable assumption. Chair think that for UL there is absolutelty no issue, simply up to the BS.

- Chair: seems no need to agree to P2 now. HARQ feedback disable is for DL if applicable in the end, and some companies seems to thinkn it can be useful for GEO. Nokia think that it depends on the repetition configuration. Think that disable of HARQ feedback can be beneficial for GEO

P4/P6 (next section)

- QC think we should wait for the details, even for NR NTN this is not clear.

- 4b: Ericsson think that if we leave this for UE implementation we at least need to ensure accuracy etc. There are a cpl of concrete proposals.

- 4b: Huawei think UE wake up will be UE impl. Don’t understand 6.2 etc.

- ZTE think this cannot be left for UE implemtation.

- Xiaomi think we don’t need to specify the UE behaviour too much.

- Apple agrees that the network don’t need to control in detail. The UE knows when he is in coverage or not. The network may not know exactly where the UE is and there may be cases when a UE is paged and paging is missed.

- Nokia think that UE need to wake up at intentionally configured Paging Occasions, this need still to be specified.

- Gatehose support the ZTE comments and the network need to be involved. Gatehouse think some information expire quite fast.

- Inmarsat think that for LEO, or GEO beamhopping. Network need to provide enough information. For LEO, ephemeries info may be used but need better understanding (multiple sattelites), could also consider time plans.

- Novamint support what gatehouse and Inmarsat is saying.

- QC think we need to work at whatever solution, canot be any mismatch between network and UE.

- Apple think the UE shall be aware of when the network tries to reach it, but the UE may choose to not wake up.

- Huawei think it is clear that UE and network shall be aligned. If something is left for UE impl it is the method the UE uses to ensure he wakes up at the right time.

P5

- QC think the main issue is frequent cell reselection. SI can be exactly same for NTN cells.

- Huawei think that P5 is to save power and this is not essential, can consider at a late stage. Ericsson agrees.

P6

- Chair assumes that this is just there, and if we don’t identify issues we don’t need to state anything. Ericsson agrees.

- ZTE think this is a R1 discussion. in R2, think determining CE level could be an issue. Nokia think this is not always the case, depend on angle.

- Oppo think there are no issues from R2 perspective.

- Huawei and LG think this is R1

- LG think that CE mode B might be used.

- Chair: We Just assume CE mode B is supported from R2 perseictive as no one has shown there are issues.

* The details of MAC (36.321) specification changes and other signalling aspects of HARQ can be discussed in Work Item phase (non technical agreement).
* For PUR, offset is suggested to be added to the start of pur-ResponseWindowTimer. If the start of the pur-ResponseWindowTimer is accurately compensated by UE-gNB RTT, there is no need to extend pur-ResponseWindowTimer value range.
* For a UE, it shall be possible to predict discontinuous coverage based on the satellite assistance information. To the extent possible/reasonable: The UE is expected to save power by not attempting to camp or connect when coverage is not there. To the extent possible/reasonable: The network is expected not try to reach UEs that are out of coverage. Note that it is still an expected requirement that UE and Network are synchronized w.r.t. when the UE is awake and reachable (e.g. for paging].
* For some IoT UEs it is expected that SI enhancements based on same SI provided in multiple cells can bring power consumption benefits.

[R2-2104818](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104818.zip) Discussion on impact of repetition transmission for IoT over NTN OPPO discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2104819](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104819.zip) Discussion on other open issues for IoT over NTN OPPO discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2104862](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104862.zip) Mobile-Termination with non-continuous coverage in NTN Gatehouse, Sateliot discussion Revised

[R2-2104863](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104863.zip) On satellite pass predictions for UE wake-up management under discontinuous coverage Sateliot, Gatehouse discussion Revised

[R2-2105369](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105369.zip) Specific issues of IoT NTN ZTE Corporation, Sanechips discussion FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105416](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105416.zip) Discussion on open issues not covered by NR NTN Nokia, Nokia Shanghai Bell discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105429](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105429.zip) Recovery of synchronization in RRC\_CONNECTED Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105559](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105559.zip) Discussion on open issues and essential enhancements for IoT-NTN XIaomi discussion

[R2-2105663](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105663.zip) Discussion on mobility enhancement for IoT NTN Huawei, HiSilicon discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105821](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105821.zip) Considerations on power saving for idle mode in discontinuous coverage Lenovo, Motorola Mobility discussion Rel-17

[R2-2105822](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105822.zip) Considerations on RLF and re-establishment for IoT NTN Lenovo, Motorola Mobility discussion Rel-17

[R2-2105860](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105860.zip) Mobile-Termination with non-continuous coverage in NTN Gatehouse, Sateliot, ESA discussion [R2-2104862](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104862.zip) Revised

[R2-2105908](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105908.zip) On satellite pass predictions for UE wake-up management under discontinuous coverage Sateliot, Gatehouse, ESA discussion [R2-2104863](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104863.zip)

[R2-2106420](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106420.zip) Mobile-Termination with non-continuous coverage in NTN Gatehouse, Sateliot, Thales, ESA discussion [R2-2105860](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105860.zip)

* 14 tdocs above noted

R2-2106211 Discontinuous coverage, SIB acquisition during cell reselection and extended DRX cycles in IoT NTN Ericsson discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN Late

### 9.2.3 Other Open issues

Address closing of open issues in general. Performance evaluations for capture in the TR.

[R2-2106486](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106486.zip) [Pre114-e][006][IoT NTN] Summary of 9.2.3 Other Open Issues Ericsson

P1P2

- Chair wonder if we can include all.

- Ericsson think that for all calculations it depends on resources allocated.

- Huwei think we should capture in the main part of the TR, how to calculate, then capture in an annex some examples (and it should be clear that this is examples).

P7 8 19 20

- Can we include also other examples? UE density, RACH capacity?

- Huawei are not ok to have these in the main body of the TR but ok as exmaples in an annex or as reference.

- ZTE think RACH capacity is a R1 issue, should not include. QC agrees. Ericsson think this was in R2 for NR NTN. Have no concerns. MTK think Ericsson are correct.

- QC think connection density should also not be included.

P3 4 5

- Chair wonder what is the intention of P4? No answer

- CATT don't’ know why we need P3 Radio conditions may be sufficient. CATT would be ok with minor enhancement to trigger RLF eelrier when needed to reduce the time out of coverage.

- QC think if we want enhancement we should trigger a new condition rather than modify and existing one. QC think that cell search / selection should be enhanced, e.g. by broadcast of next cell.

- Huawei considers an enhancement such that the UE doesn’t have to wait for RLF timers to time out, e.g. when UE is X time into the cell. Mainly for NB-IoT

- Nokia think still serving cell RLM is the basis for RLF and think any enhancement need to be based on this. Huawei think we can just avopid that T31x need long time. QC think this is completely predictable.

P9 10 11

- Chair think we have decided to follow NR NTN in the handling of TA, think no more decisions are needed now in the SI.

- Ericsson think we discussed to adapt to IoT NTN in case NR NTN solution requires too much SI reading.

- For P11 LG think that NR NTN discussed this last meeting and NR NTN decided the opposite.

- Chair think we agreed earlier on concept level/SI level and we can adapt the details (WI level) if needed.

- QC think e.g. for NB-IoT we should not update SI, e.g. for P11. Huawei think we can dicuss this in the WI.

P12 13 are covered by earlier agreement

P14 left for the WI.

P15 – see other email discussion.

P16/17

- Chair asks for the reason. Think there is CRS in LTE and eMTC.

P18

- Chair wonder if this is inter-frequency.

- ZTE think this is not enough. Chair wonder why? ZTE think that UE should prioritize TN cell if hey have similar quality.

- Huawei think this is exactly the goal of Qoffset. MTK agrees.

- ZTE think that Qoffset for both nrighbor cells and serving cell is needed.

- QC think we have also offsets for neighbour cells.

- MTK think mobility NTN TN is not in the scope of the SI. Nokia agrees and this we shudl not optimize.

Chair: There are a cpl of potential enhancements for RLF handling on the table. There is some interest, in particular for NB-IoT, to avoid that UE spend long time out of coverage when not needed (when coverage is available). Also some concern that we cannot violate the intentions of current RLM RLF that it shall happen when UE moves out of coverage. Chair suggest that it Could maybe consider on a lower priority in the Wi?

* On paging capacity, should capture in the main part of the TR how to calculate, then capture in an annex some examples (and it should be clear that this is examples).
* Include reference to company tdocs in TR 36.373 on examples of Connection density, and RACH capacity.
* For the TA handling, the details are expected to be settled in the WI, e.g. the requirements for UE to update/reread SI.
* RAN2 assumes that the existing Qoffset(s) can be used for cell re-selection between TN and NTN.

[R2-2104856](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104856.zip) Discussion on RLF mechanism of IOT over NTN CATT discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105223](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105223.zip) On Paging Capacity Evaluation for IoT-NTN Nokia, Nokia Shanghai Bells discussion Rel-17

[R2-2105254](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105254.zip) On Discontinuous coverage in IoT-NTN MediaTek Inc. discussion

[R2-2105371](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105371.zip) Paging capacity evaluation for IoT NTN ZTE Corporation, Sanechips discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105430](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105430.zip) Enhancement to SIB acquisition Qualcomm Incorporated discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN R2-2103052

[R2-2105461](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105461.zip) Connected mode related issues in IoT NTN Xiaomi Communications discussion

[R2-2105545](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105545.zip) Discussion on the issue of mobility for IoT over NTN Spreadtrum Communications discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2105662](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105662.zip) Paging evaluation for NTN IOT Huawei, HiSilicon discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2106169](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106169.zip) Connection density evaluation for IoT NTN devices Ericsson discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2106247](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106247.zip) RLF-based NB-IoT mobility in IoT-NTN CMCC discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

[R2-2106250](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106250.zip) Discussion on TA Update for IoT-NTN CMCC discussion Rel-17 FS\_LTE\_NBIOT\_eMTC\_NTN

* 11 tdocs above noted

## 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

Including discussion on whether there needs to be LS to SA3 for RAN2 actions if user location tracking attack based on GSMA LS R2-2100003.

No TEI17 documents will be handled in this meeting.

[R2-2104705](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2104705.zip) User location identification from Carrier Aggregation secondary cell activation messages (FSAG Doc 88\_009) GSMA LS in To:SA3, RAN2

[R2-2105263](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105263.zip) [Draft] LS reply on Stealthy Location Identification Attack vivo LS out To:GSMA

[R2-2105268](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105268.zip) Discussion on Stealthy Location Identification Attack. vivo discussion

[R2-2105039](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105039.zip) Draft LS on SLIC attack Huawei, HiSilicon discussion Rel-17 NR\_pos\_enh-Core

[R2-2106144](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106144.zip) Discussion on event triggered logged MDT for LTE Huawei, HiSilicon discussion Rel-17 TEI17

[R2-2106145](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106145.zip) CR to 36.306 on event triggered logged MDT for LTE Huawei, HiSilicon CR Rel-17 36.306 16.4.0 1817 - B TEI17

[R2-2106146](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106146.zip) CR to 36.331 on event triggered logged MDT for LTE Huawei, HiSilicon CR Rel-17 36.331 16.4.0 4677 - B TEI17

[R2-2106147](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106147.zip) CR to 37.320 on event triggered logged MDT for LTE Huawei, HiSilicon CR Rel-17 37.320 16.4.0 0109 - B TEI17

[R2-2106148](file:///D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2106148.zip) CR to 36.304 on event triggered logged MDT for LTE Huawei, HiSilicon CR Rel-17 36.304 16.3.0 0827 - B TEI17

## 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.

[R2-2105934](D:\\Documents\\3GPP\\tsg_ran\\WG2\\TSGR2_114-e\\Docs\\R2-2105934.zip" \o "D:\Documents\3GPP\tsg_ran\WG2\TSGR2_114-e\Docs\R2-2105934.zip) On the use of the term exclude-list Ericsson discussion Rel-17